EXPORT PERFORMANCE OF SPICES SINCE THIRD FIVE YEAR PLAN

ABSTRACT

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IN

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by

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Under the supervision of

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ABSTRACT

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The severe foreign exchange crisis has become one of the major hurdles in the rapid and balanced economic development of India. Debt servicing ratio has been mounting fast, requiring remedial measures at the earliest. A decline is also expected in the inflow of concessional loans from developed countries due to the prolonged protectionism and recession. Further as per behoved trend in the economy, imports could not be brought down and hence the only way out is to expand the exports substantially and to earn foreign exchange. Export promotion has become increasingly important for India's economic progress and to meet the expanding trade deficits. In other words, failing to achieve the substantial export growth, the country will not be able to meet its foreign exchange requirements needed for developmental work and also for debt servicing which has reached to an explosive position. This calls for increasing agricultural exports in general and spices export in particular.

Exports of agricultural commodities play an important role in the growth and development of Indian economy. Agricultural commodities generate substantial amount of foreign exchange which facilitates reimbursement of the country's import bill. On an average, agricultural commodities account for about 20 percent of the total India's export earnings.

Among India's agricultural exports Spices are one of the important agricultural commodities which have a long history of being an export oriented commodity. Spices (on an average) account for nearly 2 percent of the total India's export earnings and more than 8 percent of the total India's agricultural export earnings. A large number of spices such as pepper, cardamom, chillies, ginger, turmeric, curry powder, cumin, celery, fenel and fenugreek are exported from India. Pepper, cardamom, chillies, ginger and turmeric are considered as the major spices of India as they constitute a major portion of foreign exchange earned from exports of spices. During early 1960s India's contribution to world export of spices was more than 40 percent. However, during the decades of 1970s and 1980s the share of India has declined to about 20 percent because of the emergence of several countries in spices trade.

The main purpose of this study is to analyse the export performance of Indian spices. In order to examine the export performance of Indian spices, the thesis has been divided into eleven chapters . The first chapter is devoted to review the existing literature on export, agricultural export and spices exports. The chapter brings out that except for a few occasional reports of Spices Board and seminar reports, very little work has been done in regard to examine the export performance of India's major spices.

The second chapter highlights the significance of International Trade and the role of export in economic development. This chapter further deals with the growth in Indian exports and also India's export policy in brief during the plans period. The study reveals that International Trade has played a predominant role in the economic development of developing countries. Apart from playing a dominant role in the economy, International Trade has made possible for the world community to live a more happy and prosperous life with a high standard of living by making available those resources which are not available in a particular country. The study further expresses the opinion of various economists about the relationship between export and economic growth. They have generally accepted that exports and economic growth are closely related and the prosperity of a developing country like that of India is not possible without the development of export base. Whereas the share of India in world exports has come down during the period under study.

The third chapter examines the trends in world and India's agricultural export since 1960. This chapter further examines the trends in relative share of India in world agricultural export. In this chapter the trends in relative share of

agricultural exports in total exports of India, the trends in relative share of spices in India's total agricultural exports and India's total exports have also been critically analysed. A study of composition and direction of agricultural export of India have also been made in this chapter.

This chapter brings out that the agricultural exports of India has not been increased as fast as the world agricul- exports. As a result, the share of India in world agricultural export earnings has fallen by 1.2 percent during the period under review. Apart from this, the share of agricultural exports in India's total export earnings has also been declined by 18.3 percent. However, the share of spices in India's agricultural export earnings has increased i.e. from 7.4 percent to 8.5 percent during the same period. The study also reveals that the export of all the agricultural commodities which are under study have also increased in terms of value. In terms of quantity, the export of rice, fish and fish preparations, coffee, oilcakes, spices and tobacco has increased, while the export of raw cotton, sugar and molasses, cashew kernels and tea and mate has registered a considerable decline during the years under reference. The study further reveals that the exports of agricultural commodities to Saudi Arabia, Czechoslovakia, G.D.R., U.S.S.R., Iran, Kuwait, Polland, Bahrain, U.S.A. and Japan have gone up, while exports to Sri Lanka, U.K., Candda, F.R.G., and Singapore have decreased during the same period.

The fourth chapter deals with the export performance of Indian spices since 1960. In this eontext, the present chapter analyses the trends in world and India's exports of spices. This chapter also examines the trends in relative share of India in world export of spices. It further analyses the trends in exports of spices (Q&V) from India and the trends in relative share of exports to production of spices during 1960-61 to 1988-89. In this chapter the trends in composition and direction of spices exports from India have also been critically aaalysed during the same period.

The chapter reveals that world exports of spices have recorded much higher rate of growth as compared to India's exports of spices. As a consequence, the share of India in world exports of spices has declined by 10.7 percent between 1970 and 1987. Besides, the share of spices in total exports of India has also gone down by 1.2 percent despite the share of spices in total agricultural export earnings has increased by 1.1 percent between 1960-61 and 1988-89. The study also reveals that there has been remarkable change in composition of spices exports. Total volume of chillies and ginger exports has decreased, while total volume of turmeric exports has risen during the same period. In case of value, there has been significant increase in the share of pepper, whereas the share of cardamom has fallen drastically. The study further reveals that

a very low percentage of total production of spices is left for export purposes. The chapter brings out that there has not been any noticeable diversification in the direction of exports of spices from the country. However, exports of spices to Sri Lanka and Aden have recorded an overall decline, while exports to Japan have registered an overall increase during the period under reference.

The fifth chapter is devoted to examine the export performance of Indian pepper. In this regard, this chapter analyses the trends in exports of spices from world's major exporting nations such as Indonesia, Brazil and India. This chapter also examines the trends in the relative share of Indonesia, Brazil and India in world exports of pepper. In this chapter the trends in exports of pepper from India, the trends in relative share of pepper in spices export earnings the trends in relative share of exports to production of pepper and the trends in direction of spices exports from country have also been analysed.

This chapter reveals that India has done well as compared to Indonesia and Brazil between 1960 and 1988. However, the rate of increase in India's exports of pepper has been low as compared to the rate of growth registered in case of world, Indonesia and Brazil. Though, the share of India in world

exports of pepper is highest, India has failed in maintaining its 30 percent share which it had in 1960. It means that the share of India in world exports of pepper has declined by more than 3 percent during the period under review. The chapter also brings out that the share of pepper in total spices export earnings has increased by 14.6 percent. Similarly, the share of exports to total production of pepper has also increased by 33.1 percent in 1988-89 over 1960-61. The chapter further reveals that the exports of pepper to traditional buyers like U.S.A. and Czechoslovakia have been declining, while exports to Saudi Arabia, Japan, France, U.K. and F.R.G. have been increasing during the same period.

The sixth chapter is the study of export performance of Indian cardamom since 1960-61. In this chapter the trends in world, Guatemala, India, Sri Lanka and Tanzania's exports of cardamom have been analysed. It also attempts to analyse the trends in the relative share of Guatemala, India, Sri Lanka and Tanzania in world total exports of cardamom. It also analyses the trends in India's export of cardamom, the trends in relative share of cardamom in total spices export earnings, the trends in relative share of exports to total production of cardamom and the trends in country-wise exports of cardamom from India during 1960-61 to 1988-89.

The chapter sixth reveals that world and Guatemala's exports of cardamom have risen by 3.8 times and 15.7 times in terms of quantity, 2.2 times and 16.4 times in terms of value respectively between 1960 and 1987. Whereas the exports of cardamom from India, Sri Lanka and Tanzania has declined by less than 1 time each and thus the shares of these countries in world exports of cardamom have decreased. It also reveals that the growth rate in export of cardamom was much better in case of Guatemala as compared to world. The chapter brings out that the share of cardamom in total India's spices export earnings has gone down by 19 percent. Similarly, the share of exports to total production of cardamom has also declined by 38.8 percent during 1960-61 to 1988-89. The chapter further reveals that out of 14 countries selected for study, the exports of cardamom to only 3 countries namely, U.S.S.R., Japan, and Singapore have increased.

In the seventh chapter, export performance of Indian chillies has been analysed. In this connection, the present chapter examines the trends in world, India, China, Pakistan and Thailand's exports of chillies. This chapter also analyses the trends in relative share of India, China, Pakistan and Thailand in world exports of chillies. This chapter further analyses the trends in export of chillies from India, the trends in share of chillies in India's spices export earnings, the

trends in share of export to total production of chillies and the trends in direction of chillies exports from India between 1960-61 to 1988-89.

It reveals that world exports of chillies has increased by 9.5 times alongwith the increase in exports of Pakistan, China and India i.e. by 45.0 times, 33.2 times and 1.8 times respectively. Whereas the export of chillies from Thailand has declined by less than 1 time between 1960 and 1988. Inspite of the increase in value of Indian chillies exports, the share of India in world exports has decreased i.e. by 13.7 percent in terms of volume and 12.0 percent in terms of value. Whereas the share of China and Pakistan has shot up considerably i.e. by 19.9 percent and 8.1 percent in terms of quantity, 17.0 percent and 6.9 percent in term of value respectively over the periods under study. The growth rate in Indian chillies exports was also much lesser as compared to Pakistan, China and the world. The study also reveals that the share of chillies in total India's spices export earnings has declined by 6.8 percent. Similarly, the share of exports to total production of chillies has also gone down by 1.1 percent during the same period. The study further reveals that export of chillies to traditional importer like Sri Lanka has been decreasing, while exports to U.S.A. and U.K. have been increasing.

The eighth chapter deals with the export performance of Indian ginger. In this context, the present chapter analyses the trends in world, India, Taiwan, Jamaica and Sierra Leone's exports of ginger. This chapter also examines the trends in relative share of India, Taiwan, Jamaica and Sierra Leone in world exports of ginger. This chapter further analyses the trends in export of ginger from India, the trends in relative share of ginger in total India's spices export earnings, the trends in relative share of exports to total production of ginger and the trends in direction of ginger exports from India from 1960-61 to 1988-89.

This chapter opines that the world and Taiwan's exports of ginger has increased in terms of quantity i.e. by 3.5 times and 1.4 times respectively. Whereas the export of ginger (quantity) from India, Jamaica and Sierra Leone has fallen by less than 1 time each. The chapter further reveals that the shares of all the countries (India, Taiwan, Jamaica and Sierra Leone) in world exports of ginger have decreased by 67 percent, 7.9 percent, 11.3 percent and 11.3 percent respectively during the period under study. So far as the growth rate in exports of ginger is concerned, it was much better in case of world exports as compared to Taiwan. The growth rates were negative in case of India, Jamaica and Sierra Leone's

exports. The study also indicates that the exports of Indian ginger has risen by 11.5 times in terms of value. However, the share of ginger in India's total spices exports earnings has declined by 1.6 percent. It is also revealed that a very low percentage of total production of ginger is exported. The chapter further brings out that export of ginger to Aden has declined, while exports to Saudi Arabia, U.S.A. and Yemen A.R. have increased over the years under review.

The ninth chapter is devoted to examine the export performance of turmeric . In this context, the present chapter analyses the trends in exports of turmeric from India between 1960-61 and 1988-89. This chapter further analyses the trends in relative share of turmeric in total spices export earnings and the trends in share of exports to total production of turmeric. This chapter also examines the trends in direction of turmeric export from India from 1965-66 to 1988-89.

This chapter reveals that there has been significant increase in exports of turmeric from India between 1960-61 and 1988-89. The relative share of turmeric in total spices export earnings has also increased by 5 percent. Similarly, the relative share of exports to total production of turmeric has risen by 2.4 percent but it is still very low i.e. 5 to 9

percent of the total production. This chapter further points out that exports of turmeric to U.S.A., Singapore and Japan has increased, while exports to Netherlands, Kuwait, Sri Lanka, Canada and Iran has decreased.

The chapter tenth deals with the major constraints affecting exports of spices from India. The chapter brings to light the factors which have slowed down the pace of growth of spices exports namely steep fluctuation in prices, low productivity and high cost of production, speculative activity, low exportable surpluses, lack of improved methods of curing and polishing, lack of quality control measures, stagnation in demand, high cost of transportation, non-adoption of better packaging and involvement of more middlemen. Again, the poor research support,market research, lack of financial resources, absence of comprehensive publicity programme, absence of coordination in production and marketing, poor services, lack of direct shipping facilities, non adoption of proper post harvest. Double inspection charges and taxation problems have further retarted the growth and development of spices exports from India.

The last chapter i.e. eleventh of this thesis deals with the future prospects of India's exports of spices by 2000

A.D. In this chapter an endeavour has been made to estimate the world demand and India's exports of spices by the end of this century. It further suggests an action plan to meet the world demand more effectively so that India could recapture its old glory of being the largest producer and exporter of spices in the world.

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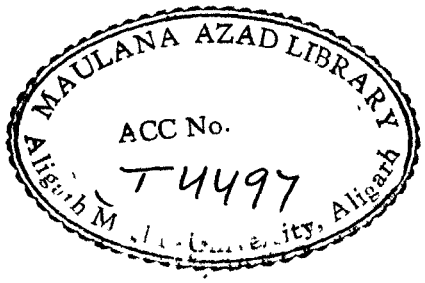

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P R E F A C E

Introduction

Export, one of the aspects of international trade, has become increasingly important to India's economic growth specially when the country has been passing through a difficult phase of foreign exchange crisis. The prevailing foreign exchange crisis has brought the country on the brink of a debt trap, requiring remedial measures at the earliest. The growing protectionism and economic recession among the aid giving countries have reduced the inflow of concessional loans and aids and thus aggravated the already deteriorating foreign exchange reserves situation. To meet this challange, two options are open, namely - (i) reduction of imports through various import control measures and import substitutions and (ii) expansion of exports. The technological development of the country does not allow the curtailment of import and hence the only way out left is to expand exports substantially and earn foreign exchange to overcome the problem of balance of payments.

Exports of agricultural commodities have played a vital role in the growth and development of Indian economy. Spices are one of the important agricultural commodities of India which have a long a history of being an export oriented commodity. They earn a considerable amount of

foreign exchange. On an average, Spices account for nearly 2 percent of the total India's export earnings and more than 8 percent of the total India's agricultural export earnings. However, the overall export performance of Indian spices has not been satisfactory as the growth rates in India's exports of spices are much lower as compared to the growth rates in exports of other spices exporting countries. Hence, the present endeavours are to analyse the export performance of India's major spices, to identify the major factors responsible for unsatisfactory performance and to suggest measures for making the performance satisfactory.

Objectives of the Study

The main objectives of the present study are as follows :

i) to highlight the significance of international trade and role of exports in economic development;

ii) to examine the trends in exports of agricultural commodities from India;

iii) to examine the relative performance of agricultural and spices exports in India's total export;

iv) to highlight the significance of spices in development of India's export trade.

v) to analyse the relative performance of India in global exports of spices;

vi) to compare the export performance of India's major spices with the export performance of other spices exporting

countries;

vii) to analyse the trends in exports to total production of spices;

viii) to examine the direction of India's spices exports;

ix) to discuss the major problems retarding the growth of spices exports from the country and to suggest suitable measures to overcome the problems for increasing the existing level of spices exports.

Hypotheses To Be Tested :

The present study seeks to examine the export performance of Indian spices on the basis of following hypotheses;

i) export leads to economic growth;

ii) the relative share of India in total world exports of spices has been declining;

iii) the export performance of India's major spices has been unsatisfactory in comparison to other major spices exporting countries;

iv) the present exportable surpluses of five major spices are not sufficient; and

v) there has been a considerable diversification in India's exports of spices to different parts of the world.

Collection of the Material

The present study is based on published and unpublished informations collected from primary and secondary sources. These informations have been gathered from Tropical Products Research Institute, London, Commonwealth Secretariat, London, Spices Board, Cochin, Directorate of Cocoa, Arecanut and Spices Development, Calicut, Directorate of Economics and Statistics, New Delhi, Export Promotion Council, New Delhi and various other institutions. Different Year Books, reference books on spices, seminar reports, journals, dailies and several other publications relating to spices and allied subjects have also been consulted.

Scope of the Study

In the present study an effort has been made to critically examine the export performance of India's major spices between 1960-61 and 1988-89. This is a fairly long period covering 28 years. It is reasonable period for analysing the export performance of spices from the country. The study has covered some of the vital aspects such as exports trends, composition, direction and problems affecting India's export performance of major spices. Due to scarcity of research materials the study could not examine certain other aspects namely the share of India in total import of spices of an individual country. However, it is claimed that all those aspects which have been covered

in the study would provide a broad base and useful guidelines to all concerned such as Spices Board, the planners and the exporters of spices. The suggested measures in the study would go a long way in boosting exports of spices for earning foreign exchange for the country which is badly needed and would also make India to regain its old glory.

Lay-out of the Work

In order to examine the export performance of Indian spices, the present thesis has been divided into eleven chapters. The first chapter is devoted to review the most recent literature available on export, agricultural exports, and spices exports. The second chapter highlights the significance of international trade and the role of exports in economic development. This chapter also examines the growth in Indian exports and India's export policy in brief during the plans period.

The third chapter is a study of the trends in India's agricultural exports. This chapter analyses the trends in world and India's agricultural exports since 1960. It also examines the trends in relative share of India in world agricultural exports. The trends in relative share of agricultural exports in total exports of India, the trends in relative share of spices in India's agricultural exports and India's total exports have also been the part of this chapter. A study of composition and direction of

agricultural exports of India have also been highlighted in the chapter.

The fourth chapter deals with the export performance of Indian spices since 1960-61. In this context, the present chapter analyses the trends in world and India's exports of spices. This chapter also examines the trends in relative share of India in world exports of spices. It further analyses the trends in exports of spices (Q&V) from India and the trends in relative share of exports to production of spices between 1960-61 and 1988-89. The trends in composition and direction of spices exports from India have also been critically analysed during the same period in the said chapter.

The fifth chapter is devoted to examine the export performance of Indian pepper. It analyses the trends in world, Indonesia, Brazil and India's exports of pepper. It also examines the trends in relative share of Indonesia, Brazil and India in world exports of pepper. In this chapter the trends in exports of pepper from India, the trends in relative share of pepper in total spices export earnings, the trends in relative share of exports to total production of pepper and the trends in direction of pepper exports from the country have also been examined.

The sixth chapter is the study of export performance of Indian cardamom. In this chapter the trends in world,

Guatemala, India, Sir Lanka and Tanzania's exports of cardamom are analysed. It also attempts to analyse the trends in relative share of Guatemala, India, Sri Lanka and Tanzania in world exports of cardamom. It further analyses the trends in India's exports of cardamom, the trends in relative share of cardamom in spices export earnings, the trends in relative share of export to total production of cardamom and the trends in country-wise exports of cardamom from India during 1960-61 to 1988-89.

In the seventh chapter, export performance of Indian chillies has been examined. It highlights the trends in total world, India, China, Pakistan and Thailand's exports of chillies. It also analyses the trends in relative share of India, China, Pakistan and Thailand in world exports of chillies. It further analyses the trends in exports of chillies from India, the trends in share of chillies in India's total spices export earnings, the trends in share of exports to total production of chillies and the trends in direction of chillies exports from India from 1960-61 to 1988-89.

The eighth chapter deals with the export performance of Indian ginger. It analyses the trends in world, India, Taiwan, Jamaica and Sierra Leone's export (quantity) of ginger. It also examines the trends in relative share of India, Taiwan, Jamaica and Sierra Leone in world

export (Quantity) of ginger. It further analyses the trends in exports ginger from India, the trends in relative share of ginger in total India's spices export earnings, the trends in relative share of exports to total production of ginger and the trends in direction of ginger exports from India between 1960-61 and 1988-89.*

The ninth chapter is devoted to examine the export performance of turmeric. It analyses the trends in exports of turmeric from India between 1960-61 and 1988-89. It further analyses the trends in relative share of turmetic in total spices export earnings and the trends in share of exports to total production of turmeric. It also examines the trends in direction of turmeric exports from India from 1965-66 to 1988-89.**

The chapter tenth deals with the major constraints affecting the exports of spices from India at length.

The chapter eleventh deals with the future prospects of India's exports of spices by 2000 A.D. In this chapter an effort has been made to estimate world demand and India's exports of spices by the end of this century. The main

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* It is pertinent to point out here that the value figures of total world, Taiwan, Jamaica and Sierra Leone's export of ginger have not been available.

** Export performance of other major exporting countries could not be compared and analysed due to the non-availability of data. The trends in relative share of India in world export of turmeric have also not been analysed due to the aforesaid reason.

purpose of this chapter is to suggest an action plan to make spices a healthy means of increasing exports in particular and economic growth of India in general.

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Chapter - I

REVIEW OF LITERATURE

Chapter - I

REVIEW OF LITERATURE

This chapter critically reviews the existing literature on export, agricultural export and spices exports from India. Related studies reveal that except for a few occasional reports of Spices Board and Seminar reports, very little work has been done in regard to the export performance of India's major spices particularly in the context of major spices exporting nations. Though, some studies have been undertaken concerning the production, productivity and export of pepper but the research material on export of India's other major spices such as cardamom, chillies, ginger and turmeric is scarce and inadequate. The researches done on pepper is also inadequate and the same is more of agriculture oriented rather than export oriented.

Dr. Farooqui[1] in his thesis entitled "A critical Evaluation of India's export stratefy since 1961," examines the role of export in economic development. The study underlies the contribution of exports in transforming the economies of the industrially advanced countries such as Japan, U.S.A., U.K., Canada, France etc. The study also analyses the overall performance of India's exports since 1950s in terms of value,

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1. Farooqui, S.U. "A Critical Evaluation of India's Export Strategy Since 1961." The Thesis submitted at A.M.U. for the award of Ph.D degree in Commerce, 1982.

vis-a-vis G.N.P. and world trade and further reveals the declining trend in India's exports. The thesis also examines the trends in diversification of India's export trade from traditional to non traditional countries.

In this thesis an endeavour has been made to diagnose India's export strategy since the beginning of the First Five Year Plan. It has been concluded that the country has failed to evolve a national export strategy to realise full potentials of the country. The export strategy for most of the time remained either dormant or neutral to growth with the result that export sector failed to function as an engine of growth. The author has suggested a comprehensive multi-pronged export strategy which has been divided into short-term and long term strategies. Short term objectives were to be achieved by following a defensive as well as offensive strategies. As against this, the long term objectives were to be achieved through logistic, operational, technical and administrative supports.

An article entitled 'Upswing In Exports' by Hussain[1] (former member of Planning Commission) published in 1988 makes a comprehensive study of the export trends in the country during 1985-86 and 1986-87. According to him, India's export increased by 15.3 percent in rupee terms in 1986-87 as against a decline of 7.2 percent in 1985-86. The improved performance was

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1. Hussain A. "Upswing In Exports", Yojana (New Delhi), Oct. 16-31, 1988, pp. 15-17.

significant in the face of a sluggish expansion in the volume of world trade in 1986 and declining world commodity prices for many export commodities. However, the author is of the opinion that in view of the disappointing export performance in 1985-86, exports in subsequent years will have to rise at a rate even higher than stipulated in the Seventh Plan of 6.8 percent per annum. Improvement in export performance is essential not only to finance critically imports but also to keep trade deficits within manageable limits.

Another article entitled 'Trends In Our Foreign Trade' by Saxena[1] published in 1989 analyses the trends in India's foreign trade since independence. In this article the author surveys the strides the country has taken despite limitations of our resources, constraints caused by protectionism and keen competition in the world markets. The author holds that modernisation and rapid pace of industrialisation have opened new avenues and the situation is encouraging. The author also points out that an impressive increase in exports both in range and quality, phenomenal import substitution and considerable expansion in market, are the direct result of a proper planning process. The author concluds with the remark that planning in our country has been used as a vehicle to accelerate economic growth and industrial progress which, consequently, provide a strong base for export effort.

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1. Saxena, S.S.; "Trends In Our Foreign Trade", Yojana (New Delhi) August 15, 1989, pp. 39-43.

A study on "Exports and Economic Growth In India" by Sujatha and Nancharaiah[1] published in 1990 examines the changes in the growth rate of Indian exports and that of GNP from 1951 to 1983. It further examines the relationship between growth of exports and that of GNP. The study based on the assumption that liberalisation of foreign trade leads to promotion of exports and promotion of exports will have an effect on economic growth. The methodology used in this study has been to compile the data relating to gross national product at factor cost and exports for the period 1951-52 to 1982-83. By using different statistical tools viz., correlation coefficient and regression they have come to the conclusion that there is positive relationship between exports and economic growth and hence it would be desirable to undertake more measures to improve the export performance of India.

In the same year i.e. 1990 Singh, Pandey and Singh[2] published a study on the Growth of India's Exports And Imports which reviews the significance of export in a developing/under developed country. In this paper the authors attempted to analyse the growth of India's exports and imports between 1960-61 and 1988-89. They also analysed the composition and direction of India's exports from 1960-61 to 1985-86. The analysis revealed that India's exports increased significantly during the

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1. Sujatha, M. and Nancharaiah, G. "Exports and Economic Growth In India, Yojana (New Delhi), Jan. 1-15, 1990, pp. 11-14

2. Singh, R.P., Pandey, R.K. and Singh, B.K.; "Growth of India's Export And Import: An Analysis" Yojana (New Delni), Jan 1-15, 1990, pp. 15-17.

period under study but increase in import has been faster than exports. The study also brought out that export earnings varied from item to item during the period but handicrafts and engineering goods brought maximum export earnings. Authors, therefore, are of the view that more attention is needed to increase the export earnings in general and in particular thr-ough handicrafts by utilizing rural population.

Dr. Roy[1] in his article entitled 'Export Prospects In the Nineties' published in 1991 reviews various issues related to International trade such as import regime, import liberalisation, exchange rate policy, export subsidies etc. He feels that India should be able to tide over the balance of payments crisis through curtailment of imports and promotion of exports on a sustained basis. To attain better results on export front it is essential to achieve higher and steady gro-wth in industrial production as our export basket contains mainly finished products. Finally, the authors suggested a number of reformative measures, whose expeditious implementa-tion would produce desired results.

An article published in 1988 by Ummat[2] entitled "Agro Exports: Performance and Prospects" discusses the export per-formance and prospects of principal agricultural commodities

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1. Roy J., "Export Prospects In the Nineties", Yojana, New Delhi, August 15, 1991, pp. 60-66.

2. Ummat, R.C., "Agro Exports: Performance And Prospects", Monthly Commentary, Indian Institute of Public Opinion, New Delhi, August 1988, pp. 17-22.

at length. The study covers items like tea, coffee, spices, cashew kernels, oilseeds and oilcakes, marine products, processed food viz., fruits, vegetables, meat products, sugar confectionery, soup, Indian made foreign liquors etc. In the study author recognises marine products, processed foods and animal husbandry as most promising areas of agricultural exports. The study also examines various impediments coming in the way of rapid growth and development of exports of individual agricultural products. Simultaneously, various measures to increase the exports of individual agricultural commodities from the country has been suggested. At last, it has been concluded that agro-exports have a bright future and can be concertedly developed in the national interest on various considerations alongwith promoting the exports of industrial products.

Dr. Khanna[1] (Adviser, Agriculture, Planning Commission) in his article 'Agricultural Export: Present Status and Future Strategies' published in 1990 emphasizes the role of agriculture in the growth process of the country. In the study an endeavour has been made to examine the growth of agricultural exports from the country between 1987-88 and 1988-89. In order to promote the exports of agricultural commodities the autnor has suggested some important measures. According to him, data bank of crops, identification of targeted areas, market intelligence,

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1. Khanna, S.S., "Agricultural Export: Present Status and Future Strategies", Yojana, New Delhi, August, 1990, pp. 63-66.

vigorous promotional measures and creation of facilities for smooth flow of goods are vital areas requires immediate attention. The study laid special emphasis on maintaining quality of the products and a mechanism for steady monitoring. It also favoured a long term commodity-wise policy of agricultural exports.

In 1987 a national symposium on spices industries was held in which Nair[1] (Director, National Research Centre for Spices, Calicut) presented a paper entitled, 'Production and Productivity of Some Important Spices in India' which critically examines the trends in area, production and productivity of major and some important minor spices. It also analyses the trends in world production of pepper, cardamom and chillies in brief. In the study major production constraints in spices have been identified such as existence of unproductive senile and disease and pest affected vines, manurial problems, non availability of planting materials in high yielding clones, loss of production due to drought etc. On the basis of these problems author has suggested some important remedial measures for increasing the production and productivity of spices in the country.

In the same Symposium another paper was presented by Velappan[2] (Director, Directorate of Cocoa, Arecanut & Spices Development, Calicut) entitled, 'Development of Spices in

1. National Symposium on Spices Industries, held on April 9-10 1987, Pub; Association of Food Scientist & Technologist, New Delhi, pp. 1-6.

2. Ibid, pp. 11-16.

India:Present Scenario, Problems and Prospects' which analyses the trends in area, production, productivity and exports of Indian Spices between 1980-81 and 1985-86. The study reveals that the trends in area, production, productivity and exports of spices have been fluctuating and the productivity per hectare of land in India is the lowest in comparison to other spice producing countries of the world. The main reasons for getting this poor yield have been the cultivation of innumerable varieties of poor genetic stock, presence of high population of senile and unproductive vines, severe incidence of diseases and pests, vagaries of nature under rainfed conditions of the crop growing etc. The author has also dealt with the developmental programmes for spices.

A dissertation entitled "Production Trends of Spices in India"[1] submitted by Khan[1] in 1989 analyses the trends in area, production and productivity of major spices namely, black pepper, cardamom, chillies, ginger and turmeric from 1970-71 to 1986-87. It also examines the trends in exports of spices from the country in brief. The author has come to the conclusion that there has been a wider fluctuation in area, production and productivity of spices in the country. The study also reveals that the growth in production of black pepper and chillies has been lesser as compared to the growth in production of ginger, cardamom and turmeric during the same

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1. Khan, M.T., "Production Trends of Spices in India", Dissertation submitted for the Award of M.Phil. degree in Commerce, at A.M.U., Aligarh, 1989.

period. The author has examined major problems of spices and suggested suitable measures to overcome these problems to improve the present production performance of Indian spices.

'Spices of India - An overview' a paper contributed (Executive Director, Spices Board, Cochin) by Dr. George[1] in a workshop held at Bolghatty Island, Cochin in April 1989, traces the history of spices since the times immemorial. It gives a synoptic view on production, internal consumption and export of spices from India. The author also covers the spices growing States in India. The author is of the opinion that there is a potential for increasing tne exports of spices from India by leaps and bounds. According to him, steps are being taken to make available a complete range of spices sought after in one or the other spice markets in the world by introduring those which are not grown in India.

In the same workshop which was held in April, 1989, another paper was presented by Hussain[2] (Representative, International Trade Centre, Geneva) entitled, 'Global Overview of International Trade And Consumption of Spices.' In this paper author gives a general view of the supply and demand of

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1. George, C.K., "Spices of Indian - An Overview", proceedings of the workshop on strategies for Export Development of Spices, Pub; Spices Board, Cochin, 1989, pp. 1-14.

2. Hussain, F.A., "Global Overview of International Trade And Consumption of Spices", Proceedings of the workshop on Strategies For Export Development of Spices, Pub; Spices Board, Cochin, 1989, pp. 57-67.

spices in the world. The study analyses the trends in imports of spices in individual markets. An attempt has also been made to examine the consumption pattern and end uses of spices in the world. According to him, in developing countries, spices are consumed chiefly in the household sector, whereas in tne industrialized countries, increasing quantities of spices are absorbed by industrial sector, mainly in food processing. The study also dealt with in brief the developments in producing/exporting as well as in importing countries which have gone a long way in increasing the trade in spices.

Mariwala[1] in his paper 'Strategy for Developing Export of Spices in Bulk' published in 1989 has analysed the world trade in spices during 1983-85. It also discussed in brief the consumption pattern of spices in the world. It further analysed the trends in India's exports of spices from 1960-61 to 1986-87. The author has estimated the world demand for spices by 2000 A.D. The author in his study has also proposed a target for India's exports of spices by the turn of this century. For achieving the target the author has identified the major thrust areas which require immediate attention. These are intensive cultivation, extensive cost reduction, efficient production to reduce cost of production, improved post-harvest technology, standardisation of quality, export finance at international levels etc.

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1. Mariwala, J.V. "Strategy For Developing Export of Spices In Bulk", proceedings of the workshop on Strategies For Export Development of Spices, Pub: Spices Board, Cochin, 1989, pp. 68-85.

'Quality control A Must For Boosting Spices Export' by Shah[1] published in 1989 is an attempt to make acquainted that quality is of paramount significance in increasing the exports of spices from the country. The author feels that inspite of 25 years of working of the quality control scheme for spices export, India is often faced with quality control problems. Therefore, the study suggested some measures to improve the quality of spices so that India could realise full value for their spices.

Yet another article, contributed by Nambiar (Deputy Director, Marketing, Spices Board, New Delhi) published in 1990, entitled Spices Exports And Branding concept'[2] discusses the importance of branding in promoting exports of Indian spices. Brand promotion helps to create a differential advantage for the owner. Whereas commodities are sold at prices, brands are less price sensitive, as the brand preference and loyalty can substantially reduce price sensitivity of the consumer and a strong brand can realise a higher price than a similar brand with poor degree of familiarity and loyalty. The author is of the view that in absence of a reputed brand, the export earnings from spices are not only affected but the

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1. Shah S., "Quality Control A Must For Boosting Spices Export", Economic Times (New Delhi), May 5, 1989, p-11.

2. Nambiar, O.T.S. (Deputy Director, Marketing , Spices Board, New Delhi), "Spices Exports And Branding Concept", Yojana, New Delhi, March 16-31, 1991, pp. 26-27.

exports of raw spices do not have any separate indentity in world market and are dominated by international supply and demand forces. Therefore, branding of spices will go a long way in stabilising the prices of major spices and will ensure a steady market.

A study entitled 'Production And Export of Indian Black Pepper - A Review' by Mathur and Singh[1] analyses the trends in Production and export of pepper from major exporting countries between 1950 and 1971. It also analyses the relative share of major exporting countries in world pepper production and export during the same period. In the study the trends in area, production, productivity and export of pepper from India to different parts of the world nave also been critically examined between 1951-52 and 1974-75. The study reveals that the share of India in world pepper production and exports declined by 37 percent and 47 percent respectively. Whereas the share of Malaysia and Brazil in world pepper production and export increased by 24.3 percent and 7.4 percent, 33.0 percent and 21.0 percent respectively during the same period. It is also pointed out that the world demand for pepper may increase by 2.5 to 3.0 percent per annum. The authors feel that there is a need to increase the production of Indian pepper to meet the growing demand of pepper in the world in general and the U.S.S.R. and other East European countries in particular.

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1. Mathur H.G. and Singh H.P., "Production And Export of Indian Black Pepper-A Review", Report of the International Seminar on Pepper Pub; Spices Export Promotion Council, 1976, pp. 34-39.

Another paper by Nair and Menon[1] entitled 'India's Pepper Trade' presented at an International Seminar on pepper held in March 1976 deals with the world trade in pepper and analyses the trends in exports of pepper from India at length. The study brought out that (i) there has been an increasing trend in exports even though the growth is not in proportion to the growth in world trade. (ii) there has been wider fluctuations in quantity, value and prices of pepper exported from India. The authors also recognised low exportable surpluses, fluctuation in production and prices, high prices of Indian pepper and lack of data as the major problems in augmenting the pepper exports from India.

A book entitled 'The Pepper Economy of India' by George, Nair and Pushpangadan[2] published in 1989 in which authors have tried to study the production pattern at farm level and the factors influencing changes in area, production, yield and exports of pepper. The pattern of cultivation practices, input use, varietal preferences of the growers as well as consumers, cost of cultivation, yield levels obtained, age of different types of pepper plants, losses due to diseases, pests and drought etc. have also been analysed in a comprehensive manner. The authors observed that average age of pepper at first bearing was between three to four years. Yield per stand was the highest for pepper holding of 0.51 to 1.0 acre and it was the lowest

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1. Nair, M.B. And Menon, K.P.G., "India's Pepper Trade", Report of the International Seminar on Pepper, pub; Spices Export Promotion Council, Cochin, 1976, pp. 100-103.
2. George, P.S., Nair, K.N. and Pushpangadan K., "The Pepper Economy of India", Oxford & IBH Publishing Co. Pvt. Ltd., New Delhi, 1989.

for holding of more than 5 acres. All varieties had low yield during first year and it took about five years to achieve stability in yield levels. However, Panniyur variety took a shorter period to get stability. On account of diseases, pests and drought about 3 to 7 percent of the plants lost annually. It was also felt that marketing margin at different levels accounted for about 15-18 percent of the export prices realised at Cochin.

An article entitled 'Sizing Up The Mega Task' by Mathew[1] published in 1989 examines the trends in world production of pepper between 1980 and 1989. It also analyses that trends in relative share of India in world pepper production. It further analyses the trends in area, production and productivity of pepper in India. The author observed that the productivity of pepper in India is the lowest i.e. 275 Kg. per hectare, whereas it is 550 Kg in Indonesia, 1200 Kg. in Brazil and 1975 Kg. in Malaysia. The author identified the main reasons for such a low productivity such as the existence of diseased and overaged pepper vines, traditional pattern of cultivation, losses due to diseases and pests etc. The study also focussed on developmental schemes under hand for increasing the productivity of pepper.

Yet another article by the same author entitled 'Hot Climes Abroad[2] published in 1989 assesses the performance of Indian pepper has been better in recent past due to poor

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1. Mathew, M.K.; "Sizing Up The Mega Task" Financial Express, New Delni, March 6, 1989, p.1

2. M.M.K."Hot Climes Abroad", op. cit,, p.1.

production in rival countries. But now the rival countries have gone for new plantations and the impact will be seen in a few years time when the world will see a massive surge in arrivals from these countries. Therefore, India should be ready to face any challenge in international market in near future. The author also emphasised on the need for exporting more to the U.S.A. which is the largest market for pepper keeping in mind the standards laid down by the Food and Drug Administration of U.S.A. The study further stressed to export West European markets, especially to the U.K., West Germany, France, Italy etc.

'Spicy Varieties'[1] published in 1989 stresses the need for diversifying the export of pepper from whole and raw form to pepper oil, Oleoresins, white pepper and dehydrated green pepper as their unit price are high. The export of dehydrated green pepper from India has got momentum and thus the value realised from the export of dehydrated green pepper in 1988 stood at Rs. 1.68 crores. At present, the dehydrated green pepper is exported to Germany, France, Italy and Belgium. The author is of the opinion that efforts should be made to introduce dehydrated green pepper in other countries of the world by popularising it.

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1. Spicy Varieties, Financial Express, New Delhi, March 6, 1989.

Dr. Vigneshwara[1] in his article entitled 'Pepper in India' published in 1989 describes the status of Indian pepper in the world during 1940s and 1950s. According to him, the position of India in respect of pepper export has been worse, whereas the position of Indonesia, Malaysia and Brazil has been better in the decades of 1970s and 1980s as compared to 1940s and 1950s. However, in the mid of 1980s Indian pepper moved towards regaining its lost glory and to some extent achieved it. The author is of the view that inspite of better export performance during last three years (1985-86 to 1987-88), the overall situation is not conducive for India and hence there is a need to increase the internal production by way of solving the present problems of the same. The author finally listed the major problems and suggested remedial measures.

An other article entitled 'Pressure on Pepper' by Katoti[2] published in 1990 examines the production and export aspects of pepper at length. It analyses the trends in world pepper production and export between 1980 and 1988. It also

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1. Vigneshwara, V. "Pepper in India", Yojana, New Delhi, Oct. 16-31, 1989, pp. 18-19.

2. Katoti, R., "Pressure on Pepper", Economic Times, New Delhi, June 14, 1990, p.11.

examines the trends in percentage of share of India in world pepper production and export during the same period. Trends in area, production, productivity and export of pepper from India to different destinations between 1980-81 and 1988-89 have further been analysed. The study reveals that productivity of pepper in India is the lowest in the world. The causes for low yield rate has also been pointed out. The export of pepper from India has been encouraging in last four years but the author fears dwindling position of India in near future because the rival countries such as Brazil, Malaysia and Indonesia have been improving their position. Therefore, the authors warns to take precautionary measures if India wants to remain as the leader.

Another article entitled 'Cardamom loses lead' by Kamat[1] published in 1990 reveals that India is no longer the leading producer and exporter of cardamom in the world. This prime position held by India about two decades ago has now been taken over by Guatemala. By 1985-86, Guatemala went ahead of India by emerging as the leading cardamom producer

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1. Kamat D., "Cardamom Loses Lead" The Economic Times, New Delhi, June 14, 1990, p.11

and exporter. This could have been possible due to sustained efforts for stepping up output, while production in India has been marked with large annual fluctuations and low productivity. The author has identified a number of areas where efforts should be done to increase the production and export of cardamom from India. The author has given some valuable suggestions to improve the production and export of cardamom.

An article entitled 'Bringing up Cardamom Export[1] published in 1990 which examines the trends in export of small cardamom from (quantity and value) India, trends in percentage share of small cardamom in total export earnings from spices and the trends in relative share of export to production of small cardamom between 1960-61 and 1987-88. The study reveals that the export of small cardamom (quantity) went down by 85 percent, whereas the share of cardamom in total spices export earnings declined by 20.9 percent (i.e. from 22.0 percent to 1.1 percent) between 1960-61 and 1987-88. Similarly, the relative share of export to production of small cardamom came down by 57.3 percent (i.e. from 66.7 percent to 9.4 percent) during the same period. The main reasons for such

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1. Khan, M.T., "Bringing Up Cardamom Export," Yojana, New Delhi, July 16-31, 1990, pp. 29-30.

a poor performance has been identified and various suggestions have been given to revive the export of small cardamom from India.

'Step to Boost Chilli Exports' by Khan[1] published in 1989 seeks to examine the trends in exports of chillies from India, trends in percentage share of chillies in total spices export earnings between 1960-61 and 1987-88. It also analyses the trends in exportable chillies as percentage of the total production. The study reveals that the overall export performance of chillies has been unsatisfactory. The surpluses left for export is very low i.e. 0.6 percent of the total production. The author has highlighted the major problems which have been restricting the growth of chillies exports from India. These are low productivity, high cost of production, instability in prices, lack of improved methods of quality control, lack of finance, poor grading and packaging etc. On the basis of these problems author has suggested suitable measures to overcome them.

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1. Khan, M.T., "Steps to Boost Chilli Exports", The Financial Express, New Delhi, Feb 22, 1989, p-6.

'Chillies Export Negligible' by Roy[1] published in 1990 analyses the trends in area, production and productivity of chillies in the country from 1970-71 to 1987-88. It also examines the trends in export of chillies from India during the same period. It has brought out that trends in area, production and productivity have been erratic during the period under study. The author has pointed out that the productivity in India is the lowest in comparison to China, Nigeria, Turkey and Spain. According to him, low productivity may be attributed to inadequate extension facilities, non-availability of improved planting material, inadequate support programmes, lack of transfering results of researches done at the grass root level etc. The author furtner feels that the export of chillies is affected mainly due to inadequate surpluses left after domestic consumption. Therefore, author has suggested to raise the productivity level to match world productivity levels so as to combat growing competition.

Another article entitled 'Ginger Export Thrust Likely' published in 1990 by Andrews[2] analyses the trends in prices of

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1. Roy, S.B., "Chillies Export Negligible", The Economic Times, New Delhi, June 14, 1990, p-13.

2. Andrews, S., "Ginger Export Thrust Likely", The Economic Times, New Delhi, June 14, 1990, p-13.

unbleached Cochin ginger between 1988-89 and 1990-91. It also analyses the trends in country-wise export of dry ginger from India during 1984-85 to 1988-89. The study reveals that the upward trend in prices of dry ginger is expected to give an impetus to the producers in stepping up the total output of ginger. This will help in increasing surpluses for export. It was also observed that during 1989-90, export performance of ginger was exceptionally good compared with that in the recent past. But the fact should not be overlooked that India was able to export more ginger than now, indicating that there has been no firm long term export perspective for this spice. The author is also of the firm opinion that momentum to ginger export has lacked proper direction. There exists ample opportunities for better marketing efforts as well as exploration of markets like Japan, the U.S.S.R., etc. The author has pointed out the problems eroding the production and export of ginger and warned that these problems should be tackled on war footing.

Gayatrinayak[1] in her article entitled 'Turmeric Exports See-Saw' published in 1990, analyses the trends in area

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1. Gayatrinayak, "Turmeric Exports See-Saw", The Economic Times, New Delhi, June 14, 1990, p-13.

production, productivity and export of turmeric from India between 1981-82 and 1987-88. It also examines the trends in country-wise export of turmeric from India between 1984-85 and 1988-89. The author opined that there has been a wide fluctuation in area, production and productivity of turmeric during the period under review. The recent down-ward trend in prices of turmeric will also affect the production and consequently the export. The author also opined that only 5 to 10 percent of the total output is made available for export which is very low. According to her, export of turmeric also witnessed a see-saw trend in the eighties. There has not been any remarkable change in direction of turmeric exports from India. Finally, the author suggested to increase exports of turmeric by making available it at more competitive prices in international market.

Conclusion:

A review of the academic works done on spices show that much attention has been given to the production aspects of spices. The above discussions also show that with the exception of a few studies conducted by Spices Export Promotion Council now Spices Board, little research has been done

in regard to assess the export performance of India's major spices. Although some articles have been published on export of different spices but there has been hardly any organised effort which could provide an indepth examination of the export performance of India's major spices. In the present study an endeavour has been made to provide an indepth analysis of the export performance of India's major spices between 1960-61 and 1988-89 by making comparison with world's major producers and exporters of spices.

Chapter - II

EXPORT AND ECONOMIC DEVELOPMENT : THE INDIAN EXPERIENCES

Chapter - II

EXPORT AND ECONOMIC DEVELOPMENT: THE INDIAN EXPERIENCES

No country in the world can claim to have had all the facilities for economical production of all its requirements within its own territory. The procurement of the goods, which a country can not produce at all or can not produce as cheaply as other countries are producing, is possible through the international trade only. Thus, a country's well-being is ascertained to a large extent by the nature of its foreign trade. As a matter of fact, in the absence of international trade it would not have been possible for the world community to live a more happy and prosperous life with a high standard of living. In the light of the above context, the present chapter describes the significance of foreign trade, the role of export in economic development, the growth of Indian exports and India's export policy in brief during the plans period.

Significance of International Trade:

International trade is an activity of strategic importance in the development process of a developing economy. As Adam Smith pointed out the "development of industry of an economy is severaly handicapped if it is deprived of the ability of trade widely. The division of labour is limited by the size of the market, and the division of labour is the key to increase productivity. Competition from abroad forces firms to cut costs and improve quality of their goods. Also contacts through trade ease

the flow of capital and speed the acquisition of new tech nology."[1] J.S. Mill discussed the indirect gains from trade and stated that "the opening of foreign trade, by making people acquainted with new objects or tempting them by easier acquisition of things which they have not previously thought attainable, sometimes, work as a sort of industrial revolution in a country whose resources were previously undeveloped for want of energy and ambition in people, inducing them to work harder for the gratification of their new tastes, and even to save and accumulate capital for the still more complete satisfaction of those tastes at a future time."[2] Emperically, there are many evidences which pointed out that when free trade policies have been followed the process of development has indeed been export led growth in the most rapidly developed/ less developed countries (e.g. South Korea, Taiwan, Singapore and Hong Kong)."[3]

The role of trade in the economic development of a country is widely recognised. Professor Haberler[4] lists for major advantages of trade. These are: (a) it provides material means, viz. capital goods, machinery and raw semi-finished

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1. Sujatha, M. and Nancharaiah, G. "Export and Economic Growth in India", Yojana, New Delhi, Jan. 1-15, 1990, p-11
2. Ibid
3. Ibid
4. Sainy, H.C., "India's Foreign Trade, Its Nature And Problems" Pub: National Publishing House, New Delhi, 1979, p-1

materials, which are indispensable for economic development; (b) it is an important source of technological knowledge, managerial talents and entrepreneurship; (c) it is supposed to be a transmitter of capital; and (d) it brings an atmosphere of healthy competition by checking monopolies and restrictive trade practices.

The idea of 'growth through trade' is not a new concept, as trade has since long been termed as an 'engine of growth', 'an activator of change' and a 'barometer of economic progress'[1] Alfred Marshall wrote at the turn of the present century that "the causes which determine the economic progress of nations belong to the study of international trade."[2] Foreign trade strengthens the relations, both economic and political, with the other trading countries and provides an opportunity to enter into customs unions which bring forth trade - creating the trade - diverting benefits. With the help of bilateral and multilateral arrangements, it multiplies the bargaining capacities of a country resulting in more capital formation and faster economic development. It also intensifies the hidden talents of entrepreneurs and thus augments the 'comparative advantages' in a country.[3]

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1. Sainy, H.C., "India's Foreign Trade, Its Nature And Problems", Op. p-1.
2. Ibid
3. Ibid

Foreign trade is the back-bone of modern economic activity. It is an important tool for producing a larger volume and variety of goods, to enhance the production and productivity and thus develop a society based upon division of labour. International trade enables a country to produce those goods in which it has best factor endowments. A country, thus, specialises in production of some specific goods and exports its surpluses to other countries and vice-versa. In most of the cases trade acts as stimulator to create more and more surpluses. If there is no trade there would have been no surplus.

International trade actuates economic development of a country in other ways too. The inducement of foreign goods creates new demands among the masses. This motivates people in general to work harder and earn sufficient money to be able to purchase some of the imported commodities. This necessarily leads to economic growth. Apart from this, domestic industries also think of producing the goods itself. In this way, import substitution takes place and creates employment opportunities. This was the spirit behind the Swadeshi Movement of 1905 which gave a strong impetus to the growth and development of modern

large scale industries in India.[1] The strategy behind India's development plans has been mainly to develop import substitutions in goods. The existence of a large scale domestic market also provides a strong incentive for import substitution as, for example, consumer industries in India. In the case of basic and strategic industries, economic independence and self-reliance has been the motive force behind import substitution, and in these cases cost becomes a secondary consideration. In many cases, successful import substitution adds to the export potential.[2]

It is universally felt that exports which is one of the aspects of International trade play a significant role in the economic life of a nation. Economic growth and exports are intimately related as they have cause and effect relationship. During the process of economic development every developing economy faces foreign exchange problems, mainly because of the structural rigidities, unfavourable external demand and imbalances in various socio-economic policies. To bridge up this gap two alternatives are usually open.

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1. Varshney, R.L., "International Marketing Management" Pub: Sultan Chand & Sons, New Delhi, 1982, p-36.

2. Ibid

_____ These are: (1) reduction of imports through various import control measures, and (2) import substitutions and expansion of export earnings by various export earning policies. The experience, however, reveals that the first alternative is not feasible atleast in the early stages of development. Hence, to accelerate the rate of growth and pull the economy out of poverty and Malthusian traps, the only choice before the country is to expand its exports in order to quicken its pace of growth and to achieve a new equilibrium at a higher level of production.[1]

It is a well known fact that the economic development of a country is closely associated with the development of industries. The development of industries involves the application of capital goods, technical know-how and several other scares means which a developing country does not possess. These resources may be met by offering the foreign loans, aids, private investments and production of exports etc. The reliance on foreign investments, grants and loans means the dependence on the mercy of outside agencies and the acceptance

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1. Farooqui, S.U., "A Critical Evaluation of India's Export Strategy Since 1961", The Thesis submitted at Aligarh Muslim University, Aligarh for the award of Ph.D degree in Commerce, 1982. P. 2

of their influences which no soverign country can tolerate. Therefore, the acquisition of these scares resources (e.g. capital goods and technical know-how) for rapid industrialisation would lie in the attainment of foreign exchange which can be met only by boosting exports. Increased exports may also lead to greater utilisation of existing capacities and thus reduce the cost of production which may lead further increase in exports. The possibilities of increasing exports may also discover the underlying investment opportunities in a particular country and thus assist its economic growth.

As it is generally believed that exports and economic growth are intimately related, there have been some statistical studies undertaken by economists for determining the role of exports in promoting economic growth. It was also hypothesised in their studies that to what extent export accelerates economic growth of a developing/less developed country. The major statistical studies are mentioned here. As Shu-Chin Yang[1] says, "For most primary exporting countries, exports are the major dynamic factor in determining the level of general economic activity. Similarly, in most less developed countries, exports are still playing an active role in generating growth and development."

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1. Yang, Shu-Chin, "Foreign Trade Problems in Economic Development; Advancement of Science, New York, May,1964, p-31.

The neo-classical economists completely ignored this possibility. They assumed a high elasticity of supply and a high elasticity of demand for exports. On the basis of these assumptions they constructed a model where the balance of payments equilibrium was to be maintained automatically, at a high level. But these assumptions do not always hold good all the time in the world. Export income may grow too slowly because the elasticity of supply is too low, or because demand for one's export depends on factors other than price which are difficult to change. If exports do not grow fast enough, the deflation in home market remains. The deflation discourages investment, so equilibrium may be restored in the balance of payments not as a result of exports growing but as a result of output declining. One cannot predict whether the balance of payment problem will be solved easily or only with great difficulty unless one knows all the relevant elasticities.[1]

The classical and neo-classical view that the foreign trade serves as an engine of growth has been modified by some and denied by others. Gustav Ranis maintains that, "the less developed economy should treat trade not as an engine of growth

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1. Halder, Animesh, "India's Export Pattern-Analysis on Potential Diversification", Pub: Minerva Associates Pvt. Ltd., Calcutta, 1976, p-10.

but as an additional efficient machine of production at its disposal transforming exports as inputs into imports as output.[1]

The above observation provides most scientific explanation of the role of exports in economic growth. Sibghatullah Farooqui[2] has reviewed in his thesis the role of exports in different stages of development which would probably justify the thesis of Gustav Ranis. The stages of economic development can be classified under the following heads. The first stage where exports are the engine of growth; a second stage where import substitution sets the pace; stage three where unbalanced growth may set off structural inflation; stage four where the propensity to import is reduced by breaking bottlenecks, and stage five where despite a low import propensity, a ceiling is set to the growth of exports. It should be mentioned here that these are not historical stages, division into stages is merely a way of distinguishing the relations in which an economy may find a place to survive itself.

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1. Farooqui, S.U., "A critical Evaluation of India's Exports strategy since 1961", op. cit., p-7.

2. Ibid. P. 8

In the first stage, when the economy is at subsistence level, the export trade initiates the growth process. An increase in per capita income increases demand for everything including imports. At this infant stage of economic development, self-sustaining progress can continue only if tne increase in imports is matched by an increase in exports. Initially, the gap between exports and imports may be bridged by foreign aid. But foreign aid so often takes the form of repayable loan, which has to be a function of export performance.[1]

In the second stage import substitution becomes prominent. The process of import substitution more often than not requires the import of capital equipment and technical know-how. These may be paid for by foreign aid in the short run but only by increased exports in the long run. Exports act either as an accelerator or as a promoter of the growth process, but export growth is not economic growth itself.[2]

Economists like Charles Kindleberger and R.J. Ball believed that there are circumstances under which an increase in exports might lead to decrease in the rate of economic growth. This suggestion by Ball has since been refuted by

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1. Farooqui, S.U., "A Critical Evaluation of India's Exports Strategy since 1961", op. cit, p-8.

2. Ibid P.9

Benton F. Massell and Kindleberger case appears to be too rare to be helpful as a guide. Kindleberger hypothesis of foreign trade as a leading sector is based on the idea of a higher degree of specialisation coupled with the lower transformation capacity. An economy with this qualification might be confronted with a declining rate of economic growth. Deflation is a factor assisting in this problem. Thus, the economy having been over specialised in certain export product might be in difficulty because of the declining world demand for the product. This diminished world demand might be explained in terms of Engle's law, or by the scientific innovation of increasing efficiency in raw material consumption in manufacturing process. This might also happen as a result of a strong demonstration effect.[1]

A number of economists have writen on the subject of export and economic development, only a few have undertaken statistical studies. Haring's[2] study suggests that "simple statistical models reveal that exports can and do act as a leading sector in developing countries" The exports economies counteract immediately to the changes in exports, shows the

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1. Farooqui, S.U., "A Critical Evaluation of India's Exports Strategy since 1961", op. cit.,pp-9-10

2. Joseph, E.H. And Joseph, F.H., "Simple Models of Trade Expansion", Western Economic Journal, Spring, 1964.

study particularly in cases of simple models. Income appears directly related to changes in exports, adding some empirical verification to existing literacy theories.

Emery's[1] investigation suggests that higher rate of economic growth tend to be associated with higher rates of exports. His investigation covers 50 countries. The findings of his investigations are; (1) there is a most significant correlation (0.82) between the growth rate of exports and that of G.N.P. about 1 per cent provided it boosts its exports by 2.5 percent. This is approximately the relationship indicated by the regression equation. Thus, his study finally suggests that countries eager to increase their growth rates should adopt the type of policies that will stimulate exports.[2]

Emery's findings have led to further research to extend the analysis on this subject as evidenced in the note prepared by Syron and Walsh. His methodology has also been criticised by Severn.[3] However, it is not proper that most of the correlations calculated by Syron and Walsh tend to support

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1. Emery, R.F., "The Relation of Export And Economic Growth", Kyklos, vol. 20 (Spring), 1967, pp-627-35.

2. Ibid

3. Ibid

Emery's general hypothesis of relationship between exports and growth. Although they criticised Emery's paper, finally they concluded: "It may be possible for exports to have as great a stimulative effect on economic growth in a less developed country as in a developed economy, provided the less developed country is not specialised in a pattern of exporting foodstuffs" (Kyklos, Spring, 1964, p-544). The main contention of Syron and Walsh is that the relationship between exports and economic growth is more complicated than Emery has suggested, and that it should be qualified to take into account weak background linkage effects. They contended that because a large population of the exports of less developed countries consists of agricultural products which have weak background linkage effects, the stimulation provided by exports to the domestic economy will also be weak. They have presented the hypothesis that a given percentage increase in non-agricultural exports is more effective in promoting economic growth than an identical percentage increase in agricultural exports. But the concept of weak background linkage effect and its exposition in their paper is not sufficient to reject Emery's findings altogether.[1]

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1. Farooqui, S.U., "A Critical Evaluation of India's Exports Strategy since 1961", op. cit., p-13.

First of all the direct backward linkage effect from agricultural expansion is only a part of the picture and secondary in character. The main impact stems from the development of other services and products to meet the demand generated from the increased income earned by the agricultural sector. Secondly, the evidence produced by Syron and Walsh is not sufficiently strong, as the size of the group involved in the correlation is relatively small. In one correlation that failed to support the hypothesis (relationship between exports and growth) only nine countries were taken. Syron and Walsh recognised the weakness of their evidence and state that "these conclusions are very tentative", as they are based on a limited range of economic experience. Thirdly, the alleged weak linkage effects of agricultural as against manufacturing have a certain validity.[1] As Hirscnman himself admits, "the absence of direct linkage effect of primary production for exports" lends these views a plausibility that they do not have in the case of foreign investment in manufacturing. I say plausibility rather than validity, for while as such the primary production activities leading to exports may exert few developmental

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1. Farooqui, S.U., "A Critical Evaluation of India's Exports Strategy since 1961", op. cit, p-13.

effects, they do finance imports which can become very powerful agent of development.[1]

It is again told that Emery's hypothesis and findings have been criticised by Severn. Severn also indicated that the policy conclusions are unwarranted because of mutual causation" and unjustified because of the use of static models in place of a dynamic model. These words are too weighty, particularly in regard to the instance he advances of 'external causation', and because even static models do furnish a few confirming witness of the hypothesis. Emery did not claim that the methodology adopted by him is an ideal one which is confirmed by his own statement: "While the statistical result tend to support the hypothesis, they do not completely prove it.[2]

Indian Exports since 1960:

It is widely recognised that expansion of exports plays a pivotal role in the development process of developing or less developed economies. It provides necessary resources for having needed imports, which in turn, contributes to the nation's growth. It is an undisputed fact that there has been

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1. Albert, O.H., "The Strategy of Economic Development", Yale University Press, 1958, p-110.

2. Halder, Animesh, "India's Export Pattern-Analysis on Potential Diversification", op. cit, pp-13-14.

a significant growth in total exports of India since 1960. However, the growth of Indian exports can be rightly judged when it is compared to the growth in world exports. A clear cut picture of the growth in world and Indian exports can be had from the table 1.

It is clearly visible from the table 1 that the total world exports went up from $ 112300 million in 1960 to $ 2832894 million in 1988, indicating an overall rise of more than 25 times. Total exports from India also increased by nearly 10 times i.e. from $ 1331 million to $ 13182 million between 1960 and 1988. It means that the rate of increase in world exports has been much higher than the rate of increase in India's exports. This has been mainly due to higher rate of increase in exports in case of other countries (Japan, FRG, South Korea etc.) as compared to the rate of increase in exports from India. It is also relevant to analyse here that the share of India in world export has declined by 0.7 percent i.e. from 1.2 percent to 0.5 percent in 1988 over 1960.

Trends In Annual Average Compound Growth Rates

Table 2 indicates the trends in annual average compound growth rates in world and India's exports during 1960-65 to 1985-88.

Table - 1

Trends In World Exports, Indian Exports and Share of India in World Exports During 1960 and 1988

V=US $ Million

Year	Total World Exports	Total Indian Exports	% Share of India in World
1960	112300	1331	1.2
1965	165400	1687	1.0
1970	315100	2026	0.6
1975	875500	4355	0.5
1980	2002000	8378	0.4
1981	1976733	8373	0.4
1982	1845641	8807	0.4
1983	1811600	8713	0.5
1984	1904600	9874	0.5
1985	1923400	8750	0.5
1986	2113600	9178	0.4
1987	2349700	11368	0.5
1988	2832894	13182	0.5
% increase or decrease over 1960	2422.6	890.4	-0.7

Source: 1960 and 1965, Extracted from the Book 'Export Management' by R.R. Khan, Sultan Chand & Co. New Delhi, 1979.

Upto 1970 and 1986-Economic Survey, 1988-89.

1987-International Finance Statistics, April, 1989, Published by I.M.F.

1988-Economic Survey, 1990-91

Table - 2

Trends In Annual Average Compound Growth Rates
In World and India's Export During
1960-65 to 1985-88

Year	World Exports Annual Average Compound Growth Rates	India's Exports Annual Average Compound Growth Rates
1960-65	8.1	4.9
1965-70	13.8	3.7
1970-75	22.7	16.5
1975-80	18.0	14.0
1980-85	-0.8	0.9
1985-88	13.8	14.6
1960-88	12.2	8.5

Source: Computed and Compiled From Table 1

It is seen from the table 2 that during 1960-65 the annual average compound growtn rate in world exports was mucn higher as compared to India. During 1970-75 and 1975-80 also the compound growth rates were higher in case of world exports as compared to the growth rates in India's exports. However, during 1980-85 world exports recorded negative annual average compound growth rate, while India witnessed positive annual

average compound growth rate. Between 1985 and 1988 India registered better compound growth rate as compared to the growth rate recorded by world exports. As a whole, world has done better than India as it has witnessed better annual average growth rate between 1960 and 1988.

Export Policy of India During the Five Year Plans:

After getting independence India had adopted an import substitution strategy for economic growth believing that vast size of the country and the availability of several types of resources can support it. The factor that dominated export policy has been the small share of exports in total national income. Exports have averaged 6 per cent in the fifties while imports were about 10 per cent. Then over a period of time with rising national income, the size of export sector came down further to 4.7 per cent on an average. This small size of export sector influenced the Government scheme of things. In the First Plan it was stated that "in view of the urgent need for investment in basic development, diversion of resources on large scale to trade must, in an underdeveloped economy be regarded as a misdirection of resources."[1] In the Second Plan emphasis was laid on rapid industrialisation of the economy on the basis

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1. Sujatha, M. & Nancharaiah, G., "Exports And Economic Growth In India" op. cit., p-12

of heavy and basic industries. This strategy has been formulated in the framework of the Mahalanobis Model", who placed a considerable emphasis on import substitution. It was stated that "while every effort has to be made to promote export of new items and to develop and diversify the markets for tne country's major exports it has to be recognised that only after industrialisation has proceeded in some way that increased production at home will be reflected on larger export earnings.[1] But the impact of this strategy was felt on the foreign exchange reserves of the country which declined from Rs. 902.4 crores to Rs. 303.6 crores in 1960-61 (DGCI & S data). This came as a shock to the planners and in the Third Plan they explored the possibility of supplementing the export earnings with external assistance. Greater emphasis was laid on exports and subsidisation was introduced covering a wide range of exports. These subsidisation policies essentially took two forms (1) Fiscal measures such as exemption from and refund of indirect taxes, drawback on import duties for raw materials and rebate on excise duties, direct tax concessions. Also there was provision for supply of key inputs at international prices for exporters and freight concessions on movement of merchandise. (2) Import

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1. Sujatha, M. & Nancharaiah, G., "Exports And Economic Growth In India", op. cit., p-12.

titlement scheme under which eligible exporters receive import licences fetching high premia, prorata, to the value of exports effected. But the import and exchange control measures including high nominal tariff and quota restrictions accompanied by tougher regulations on industrial licencing was continued.[1]

Indian rupee was devalued on June 6, 1966 to less than two-third of its current exchange rate to make exports beneficial and imports costlier. At the time of devaluation export promotional measures were removed, since devaluation envisaged that export products would become competitive in the international market without incentives. But the net result was that it excercised adverse effect on India's exports. The value of imports was much higher than that of exports causing a huge trade deficit (Rs. 921 crores). This led to adoption of the three annual plans instead of a five year plan after tne completion of Third Five Year Plan. During this period some of the export promotional measures were restored. They include cash subsidies and import replenishment scheme.[2]

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1. Sujatha, M., and Nancharaiah, G., "Exports And Economic Growth In India", op. cit, p-12

2. Ibid.

From the Fourth Plan onwards a series of policy innovations were introduced to increase the industrial capacity destined for export production. A trade Development Authority was set up to provide a comprehensive range of services covering marketing, finance and product adoption to exporters particularly those in the Small Scale Sector. In 1974-75 Export Processing Zone was created for electronic equipment and components near Santa Cruz Airport at Bombay. An Export Import Bank was established in 1981-82 with an authorised capital of Rs. 200/- crores. It provides financial assistance to exporters and importers and function as the principal institution for coordinating the working institutions engaged in financing foreign trade.[1]

Besides these measures, the Government of India appointed three Committees to review the structure of trade policies and performance of India's foreign trade. They were Alexander Committee (Jan., 1978), Tandon Committee (Jan., 1980) and Abid Hussain Committee (Dec.,1984). Based on the recommendations of these Committees, import licensing procedures were simplified and import of capital goods, intermediate goods and computer systems have been liberalised. A scheme has been initiated to enable 100% export oriented units similar to those normally available

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1. Sujatha, M., and Nancharaiah, G., "Exports and economic Growth In India" op. cit., p-12

only in free trade zones to encourage the export of non-traditional manufactured items. The Government announced a long term import-export policy in April 1985, for a period of three years, upto March 1988 with the objective of imparting continuity and stability to the policy regime. The policy seeks to reduce the licensing by abolishing the category of automatic licences and most of the items of automatic permissible list have been shifted to Open General Licence. An import-export pass book scheme was announced for the manufacture exporters, for the duty free import of inputs required for export production subject to actual user condition. The new long-term import export policy was issued by the Commerce Ministry on March 30th 1988. Main features of this policy were Open General Licence list was enlarged to remove customs problems so that necessary raw materials could be imported without any difficulty. Under the import policy exporters are entitled to get import replenishment licences to replenish the raw materials and components used in the manufacture of products exported. The coverage of the import export pass book scheme is being extended to bring within its purview manufactures who are well established in the domestic market. Consequently, manufacturers who are having three years average turnover of Rs. 15 crores and above, would be given the facility of pass book upto an extent of ten percent of the average turnover. This will be subject to production of bank

guarantee equivalent to the full customs duty leviable.[1]

Export policy has been made simpler and easy to operate. In restructuring the policy, a system of having various categories of controlled commodities has been introduced and the system of quota licencing and fee licencing has been abolished. Similarly, licencing on first come first serve basis has also been abolished. The scope of export of free trade samples has been enlarged and rationalised.[2]

Thus, it is clear that there has been a change in industrial strategy of India from import substitution to normal to export oriented trade policy keeping in view the need of foreign exchange which will facilitate the industrialisation of the country by providing necessary imports for the purpose.

From the foregoing discussions, it has brought out that foreign trade plays a vital role in the economic development of a developing nation. Foreign trade makes possible the inflow of capital goods, technical know-how and machinery which are the essential requirements for a developing country to make as an industrial economy. Foreign trade also leads to larger

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1. Sujatha, M., and Nancharaiah, G., "Exports and Growth in India", op. cit., p-12

2. Ibid.

production and productivity through increase in foreign demands. Exports are considered as one of the leading factors in the growth process of an economy as it increases the volume of production, income, and creates employment opportunities etc. They also raise the standards of living by satisfying the other import needs of the country. The relationship (2.5:1) between exports and economic growth suggested by Emery may not be applicable to a particular country. But it does not necessarily mean that such a relationship can not hold good and exports can not be a leading factor in the economic advancement of the developing countries. The hypothesis that exports are the stimulating factor in the growth process has also been positively tested by various economists. It has, thus, generally accepted that a rise in exports means an increase in overall economic growth.

It has also been observed that India's exports have recorded significant growth during the years under review. But at the same time, the share of India in world exports has reduced considerably during the same period.

Chapter - III

TRENDS IN INDIA'S AGRICULTURAL EXPORTS

Chapter - III

TRENDS IN INDIA'S AGRICULTURAL EXPORTS

India is primarily an agriculture based country. It supplies raw materials to the large and small industries of India. Cotton and Jute textile industries, sugar, Vanaspati, Tea etc. depend on agriculture directly. There are many other industries (e.g. silk) which are indirectly supported by agriculture. Similarly, small scale and cottage industries like handloom weaving, oil crushing, rice husking etc. also depend on agriculture for their raw materials. The agricultural sector contributes about 34 percent[1] of the country's national income and employs nearly 69 percent[2] of the total working population in India. It plays a vital role in the sphere of international trade also. The present chapter deals with the significance of agricultural exports in Indian economy. It analyses the trends in percentage share of India in world agricultural exports, trends in India's agricultural exports (Q&V), trends in composition and direction of India's agricultural exports. It also highlights the trends in relative share of agricultural and spices exports to total India's exports and the percentage share of spices in total agricultural exports of India.

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1. Sundharam, K.P.M., and Datt, Ruddar, "Indian Economy" Pub: S. Chand and Company Ltd., New Delhi, 1990, p-412.

2. Ibid.

Exports of agricultural commodities, in addition to providing the much needed foreign exchange for the country add to the competitiveness of production, productivity and quality in relation to other exporting countries. This enables realisation of economies of scale and this benefits domestic consumers as well. Sustained exports help to modernise production, post harvesting, processing and marketing system and thus taking advantage of most recent technological advances in the network planning process.[1]

Agricultural exports have contributed significantly to the export trade of India. Tea, Coffee, Cashew Kernels, marine products, oil cakes, rice, raw cotton, tobacco, sugar and meat and meat preparations are the principal agricultural commodities exported from India. In 1988-89 the first six commodities (tea, coffee, cashew kernels, marine products, oil cakes and rice) accounted for more than 75 percent and 12 percent of India's total agricultural and - India's total export earnings respectively. Till late seventies, agricultural exports accounted for 30 to 40 percent of the total India's export earnings. However, this share came down to a level of 16 percent (Table 11) during 1988-89 despite the fact that total agricultural exports increased considerably over the years. In 1988-89

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1. Khanna, S.S., "Agricultural Export: Present Status and Future Strategies", Yojana, New Delhi, August 15, 1990, p-63.

exports of agricultural commodities realised Rs. 3315 crores as a foreign exchange which was nearly 15 times higher than the figure Rs. 222 crores earned during 1960-61.

Trends In World Agricultural Exports(Value):

Table 1 shows the trends in world agricultural exports (value)and the share of India in world agricultural exports from 1960 to 1988.

If we look at table 1, it appears that the total agricultural export earnings of the world has recorded an overall increase of nearly 10 times. Total earnings of India from the exports of agricultural products has also registered an overall rise of nearly 4 times. This means that the rate of increase in agricultural export earnings of the world is much higher than the rate of increase in agricultural export earnings of India. This may be ascribed to higher rate of growth sustained by other countries of the world as compared to the growth rate registered in India. The share of India in total world agricultural export earnings was 2 percent in 1960 which has been reduced to only 0.8 percent in 1988. The main reason behind the shrinking share of India in world agricultural export earnings is that India could not generate desired surpluses of agricultural products for export due to higher domestic demand. It is also true that productivity both per-hectare of land and per-person empl-

Table - 1

Trends In World And India's Exports of Agricultural Commodities And the Share of India In World Export of Agricultural Products During 1960 and 1988

V = (Million US dollar)

Year	World	India	% Share of India in the world
1960	29000	600	2.0
1965	N.A.	N.A.	-
1970	N.A.	N.A.	-
1975	121995	1728	1.4
1980	232569	2356	1.0
1985	208584	2350	1.1
1986	226505	2462	1.0
1987	251722	2416	1.0
1988	287117	2238	0.8
% increase or decrease over 1960	890.0	273.0	-1.2

Source: 1. "Agricultural Exports Strategy-Problems And Prospects", Published by Economic And Scientific Research Foundation, New Delhi, 1986.

2. F.A.O. Trade Year Book (Various issues)

oyed are extremely low as compared to other advanced countries of the world, such as, U.S.A., Canada, Japan, F.R.G. and Republic of Korea.[1]

Table 2 indicates the trends in annual average compound growth rates of world and India's agricultural exports between 1970-75 and 1985-88.[2]

It is seen from table 2 that during 1975-80 world's agricultural exports registered an impressive compound growth rate as compared to the growth rate recorded by India's agricultural exports. During the periods 1980-85 world's agricultural exports recorded negative compound growth rate, whereas the growth rate in India's agricultural exports was negligible. Between 1985 and 1988 world achieved much better compound growth rate, while India witnessed negative growth rate. On the whole, world has done fairly well as compared to India as it recorded better annual average compound growth rate during 1960 and 1988.

Trends In India's Agricultural Exports:

Table 3 shows the trends in exports of agricultural and allied products (quantity and value) from India between 1960-61 and 1988-89.

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1. "Agricultural Exports Strategy", Problems And Prospects, Pub: Economic And Scientific Research Foundation, New Delni, 1986, p-2.

2. Data prior to 1970-75 in regard to world Agricultural Exports are not available and hence annual average compound growth rate during the same period cannot be computed.

Table - 2

Trends In Annual Average Compound Growth Rates In World And India's Agricultural Exports during 1975-80 to 1985-88

Year	World Annual average compound growthe rates	India Annual average compound growth rates
1960-65	--	--
1965-70	--	--
1970-75*	--	--
1975-80	13.8	6.4
1980-85	-2.2	Nil
1985-88	11.2	-1.6
1960-88	8.5	4.8

Source: Computed and compiled from Table 1

Note: *Data prior to 1970-75 are not available and hence annual average compound growth rate cannot be computed.

Table - 3

Trends In Exports of Agricultural and Allied Products (Quantity and Value) from India during 1960-61 to 1988-89

Q = ('000 tonnes)
V = (Rs. crores)

Year	Quantity	Value
1960-61	938.8	222.0
1965-66	1635.0	289.8
1970-71	1837.6	455.7
1975-76	2786.2	1353.7
1980-81	2435.0	1978.2
1981-82	2526.3	2221.1
1982-83	2568.1	2450.0
1983-84	2829.9	2621.7
1984-85	1996.2	2996.5
1985-86	1724.1	2662.2
1986-87	1944.6	3104.4
1987-88	1710.6	3027.7
1988-89	2306.2	3315.0
% increase or decrease over 1960-61	145.7	1393.2

Source: (i) Economic Survey (various issues) Published by Government of India.

(ii) Basic Statistics Relating to Indian Economy (1972) Published by Planning Commission, New Delhi.

It is evident from the table 3 that the total quantity of agricultural and allied products exported from the country has recorded an overall rise of more than 2 times during 1960-61 to 1988-89. Similarly, the total value realised from the exports of agricultural and allied products has witnessed an overall increase of nearly 15 times during the same period. It means that the rate of increase in value of exports per annum is nearly three folds more than the rate of increase in volume of exports. This has been mainly due to higher unit value realisation during the period under reference. It is also worth mentioning here that in 1988-89 India has achieved the highest amount of foreign exchange, while the highest quantity was exported in 1983-84. This all shows that the prices of agricultural commodities have shot up considerably in international markets during the decade of the 1980s.

Trends In Annual Average Compound Growth Rates:

Table 4 shows the trends in Annual Average compound growth rates in exports of agricultural commodities (quantity and value) from India during 1960-65 to 1985-88.

Table 4 reveals that during 1960-65 quantity exported has recorded an impressive compound growth rate as compared to the growth rate achieved in value of exports. Between 1965 and 1970 value of exports has shown higher annual average com-

Table - 4

Trends In Annual Average Compound Growth Rates In Exports of Agricultural Commodities(Quantity and value) From India During 1960-65 to 1985-88

Year	Quantity Annual average compound growth rates	Value Annual average compound growth rates
1960-65	11.7	5.5
1965-70	3.7	9.5
1970-75	8.7	24.3
1975-80	-2.7	7.9
1980-85	-6.7	7.3
1985-88	10.2	7.6
1960-88	3.3	10.1

Source: Computed and compiled from table 3

pound growth rate as compared to volume of exports. The same trend prevailed upon during the period 1970-75 so far as value of exports is concerned. During the years 1975-80 value of exports has done well as compared to the volume of exports which has registered negative compound growth rate. During the period 1980-85 also volume of exports recorded negative annual average compound growth rate, whereas total value of exports registered positive compound growth rate. Between 1985 and 1988 volume of exports witnessed much better compound growth rate as compared to the value of exports. On the whole, (between 1960 and 1988) value of exports has done fiarly well as compared to volume of exports.

Composition of Exports of Agricultural Commodities:

A large number of agricultural products are exported from India. However, only major items such as coffee, tea and mate, oil cakes, tobacco, cashew kernels, spices, sugar and molases, raw cotton, rice, fish and fish preparations, meat and meat preparations, fruits, vegetables and pulses have been taken for the study in question as they account for the lion's share of the total agricultural export earnings. Table 5 shows the trends in composition of exports of agricultural and allied products from India (quantity) during 1960-61 to 1988-89.

Table - 5

Trends In Composition of Exports of Agricultural And Allied Products from India During 1960-61 to 1988-89

Q = ('000 tonnes)

Commodity	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89	1960-61*
Coffee	19.7 (2.1)	26.5 (1.6)	32.2 (1.8)	59.4 (2.1)	87.3 (3.6)	98.9 (5.7)	74.5 (5.2)	88.7 (5.2)	82.6 (3.6)	329.3
Tea and Mate	199.0 (21.2)	197.0 (12.0)	199.1 (10.8)	212.3 (7.6)	229.2 (9.4)	205.6 (11.9)	190.5 (13.2)	197.3 (11.5)	193.4 (8.4)	-2.8
Oil cakes	433.0 (46.1)	829.0 (50.7)	878.5 (47.8)	985.4 (35.4)	886.0 (36.4)	806.9 (46.8)	989.9 (68.5)	684.2 (40.0)	1242.6 (53.9)	187.0
Tobacco	47.4 (5.0)	59.3 (3.6)	49.8 (2.7)	78.5 (2.8)	91.3 (3.7)	80.5 (4.7)	89.1 (6.2)	76.4 (4.5)	56.1 (2.4)	18.4
Cashew kernels	43.6 (4.6)	51.3 (3.1)	60.6 (3.3)	53.6 (1.9)	32.3 (1.3)	37.1 (2.2)	46.6 (3.2)	36.1 (2.1)	37.7 (1.6)	-13.5
Spices	47.2 (5.0)	62.1 (3.8)	46.9 (2.6)	57.2 (2.0)	84.2 (3.5)	89.0 (5.2)	94.8 (6.6)	83.1 (4.9)	93.8 (4.0)	98.7
Sugar and Molases	96.0 (10.2)	359.0 (22.0)	473.0 (25.7)	1201.2 (43.1)	97.0 (4.0)	37.9 (2.2)	3.1 (0.2)	2.3)0.1)	52.4 (2.3)	-45.4
Raw cotton	33.0 (3.5)	36.0 (2.2)	32.1 (1.7)	52.0 (1.9)	131.6 (5.4)	35.7 (2.0)	175.6 (12.2)	73.0 (4.3)	13.5 (0.6)	-59.1
Rice	N.A.	N.A.	32.8 (1.8)	34.3 (1.2)	726.7 (29.8)	245.0 (14.2)	181.1 (12.5)	371.6 (21.7)	375.6 (16.3)	1043.3
Fish & Fish Preparations	19.9 (2.1)	14.8 (0.9)	32.6 (1.8)	52.3 (1.9)	69.4 (2.9)	87.5 (5.0)	99.4 (6.9)	97.9 (5.7)	158.5 (6.9)	696.5
Meat & Meat Preparations	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	-
Fruits, Vegetables and Pulses	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	-
Miscellaneous Processed Fruits	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	-
Total	938.8	1635.0	1837.6	2786.2	2435.0	1724.1	1444.6	1710.6	2306.2	145.2

Source: Same as Table - 3
Figures in bracket are the relative percentages.

*Percentage Increase or decrease over 1960-61

It is evident from the table 5 that total volume of agricultural commodities recorded a rise of more than 2 times. Similarly, coffee export has recorded an overall increase of more than 4.0 times during 1960-61 to 1988-89. Total volume of tea & mate export has gone down by less tnan 1.0 time. Whereas total export of oil cakes has gone up by nearly 3.0 times in 1988-89 over 1960-61. Total volume of tobacco export has witnessed an overall increase of 1.2 times. While total export of cashew kernels went down by less than 1.0 time between 1960-61 and 1988-89. Total export of spices has risen by nearly 2 times during the same period. Total volume of sugar and molases has recorded a decrease of less than 1.0 time. Total export of raw cotton has also fallen by less than 1.0 time. Contrary to this, total export of rice has registered an overall increase of more than 11.0 times. Total export of fish and fish preparation has also gone up by nearly 8.0 times during the period under review.

On examination of the relative share it is seen that the share of rice in total agricultural exports has increased by 14.5 percent followed by oilcakes 7.8 percent, fish and fish preparations 4.8 percent and coffee 0.5 percent between 1960-61 and 1988-89, while the share of tea and mate, sugar and molases, cashew kernels, raw cotton, tobacco, and spices

has decreased by 12.8 percent, 7.9 percent, 3.0 percent, 2.9 percent, 2.6 percent and 1.0 percent respectively during the period under reference.

Trends in Annual Average Compound Growth Rate(Volume):

Table 6 shows the trends in annual average compound growth rates in regard to composition of exports of agricultural commodities (quantity) from India during 1960-65 to 1985-88.

It is clearly evident from the table 6 that during 1960-65 sugar and molases have recorded much better compound growth rate as compared to the growth rate registered in case of oil cakes, coffee, spices, tobacco, cashew kernels and raw cotton, Whereas fish and fish preparations and tea and mate witnessed negative compound growth rates. During 1965-70 fish and fish preparations have achieved highest compound growth rate followed by sugar and molases, coffee, cashew kernels, oil cakes and tea and mate. But spices, tobacco and raw cotton have registered negative annual average compound growth rate during the same period. Between 1970 and 1975 all the commodities namely coffee, tea and mate, oil cakes, tobacco, spices, sugar and molases, raw cotton, rice and fish and fish preparations have recorded positive compound growtn rates except cashew kernels.

Table - 6

Trends In Annual Average Compound Growth Rates In Composition of Exports of Agricultural Commodities From India During 1960-65 to 1985-88

Commodities	1960-65	1965-70	1970-75	1975-80	1980-85	1985-88	1960-88
Coffee	6.1	4.0	13.0	8.0	2.5	-5.8	5.3
Tea and Mate	-0.2	0.2	1.3	1.5	-2.1	-2.0	-0.1
Oil cakes	13.9	1.2	2.3	-2.1	-1.9	-15.5	3.8
Tobacco	4.6	-3.4	9.5	3.1	-2.5	-11.3	0.6
Cashew kernels	3.3	3.4	-2.4	-9.6	2.8	0.5	-0.5
Spices	5.6	-5.5	4.0	8.0	1.1	1.8	2.5
Sugar & Molases	30.2	5.7	20.5	-39.5	-17.1	11.4	2.1
Raw cotton	1.8	-2.3	10.1	20.4	-23.0	-27.7	-3.1
Rice	--	--	0.9	84.2	-19.5	15.3	--
Fish & Fish Preparations	-5.7	17.1	9.9	5.8	4.7	21.9	7.7
Meat & Meat Preparations	--	--	--	--	--	--	--
Fruits, Vegetables & Pulses	--	--	--	--	--	--	--
Miscellaneous Processed Fruits	--	--	--	--	--	--	--

Source: Computed and Compiled From Table -5.

During the periods 1975-80 rice has recorded much better compound growth rate as compared to raw cotton, coffee, spices, fish and fish preparations, tobacco and tea and mate. While other agricultural commodities like sugar and molases, cashew kernels and oil cakes recorded negative annual average compound growth rates. Between 1980 &85 only four commodities e.g. coffee, cashew kernels, spices and fish and fish preparations witnessed positive compound growth rates. Rest of the agricultural products recorded negative growth rates during the period under review. Between 1985 and 1988 the growth rate was highest in case of fish and fish preparations followed by oil cakes, rice, sugar and molases, spices and cashew kernels, while coffee, tea and mate, tobacco and raw cotton registered negative compound growth rates. On the whole,fish and fish preparations registered highest annual average compound growth rate as compared to the growth rate recorded by coffee, oil cakes, spices and tobacco. Whereas the growth rate was negative in case of tea and mate, cashew kernels, sugar and molases and raw cotton during the same period.

Table 6 also indicates that the trends in annual average compound growth rates were slightly steady in case of coffee, spices, fish and fish preparations and rice. Sugar and molases witnessed positive growth rates till 1970-75 and thereafter they registered negative compound growth rates. So far

as tea and mate, oil cakes, tobacco, cashew kernels and raw cotton are concerned, the trends in annual average compound growth rates were faltering. This all shows the regular fluctuations in the volume of exports between 1960 and 1988.

Value:

Table 7 shows the trends in composition of exports of agricultural and allied products (value) from India during 1960-61 to 1988-89.

It is seen from table 7 that total value of agricultural commodities exports registered an increase of more than 14 times. Similarly, coffee export recorded an overall increase of more than 30.0 times during 1960-61 to 1988-89. Total value of tea and mate export rose by nearly 5.0 times. Total export earnings from oil cakes went up by nearly 26.0 times. Total earnings from export of tobacco also registered an overall rise of more than 8.0 times. Total earnings from the export of cashew kernels went up by nearly 15.0 times. Total value of spices export witnessed an increase of 17.0 times. Total value of sugar and molases export increased by more than 2 times during the period 1960-61 to 1988-89. Total value of raw cotton export stood up by more than 3.0 times. Total value of rice export went up by more than 66 times between

Table - 7

Trends In Composition of Exports of Agricultural And Allied Products From India During 1960-61 to 1988-89

V = (Rs. crores)

Commodities	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89	1960-61*
Coffee	9.2 (4.1)	12.9 (4.5)	25.1 (5.5)	66.6 (4.9)	214.2 (11.4)	264.9 (10.0)	296.7 (9.6)	263.2 (8.7)	280.0 (8.4)	2943.5
Tea & Mate	123.6 (55.7)	114.8 (39.6)	148.3 (32.5)	236.8 (17.5)	425.5 (22.7)	626.3 (23.5)	576.8 (18.6)	542.4 (17.9)	599.0 (18.0)	384.6
Oil cakes	14.3 (6.4)	34.6 (11.9)	55.4 (12.2)	86.1 (6.4)	125.1 (6.7)	134.0 (5.0)	189.8 (6.1)	173.3 (5.7)	370.0 (11.2)	2487.4
Tobacco	15.7 (7.0)	21.2 (7.3)	32.6 (7.2)	98.4 (7.3)	140.7 (7.5)	169.6 (6.4)	185.3 (6.0)	134.6 (4.4)	128.0 (3.9)	715.3
Cashew kernels	18.9 (8.5)	47.4 (16.4)	57.1 (12.5)	96.1 (7.0)	140.1 (7.5)	225.1 (8.5)	327.6 (10.6)	306.7 (10.1)	277.0 (8.4)	1365.6
Spices	16.6 (7.5)	23.1 (8.0)	38.8 (8.5)	71.0 (5.2)	116.4 (6.2)	283.0 (10.6)	279.0 (9.0)	309.3 (10.2)	283.0 (8.5)	1604.8
Sugar and Molases	3.3 (1.5)	11.9 (4.1)	29.3 (6.4)	472.3 (34.9)	39.8 (2.1)	15.8 (0.6)	1.4 (0.0)	0.8 (0.0)	7.0 (7.2)	112.2
Raw Cotton	8.7 (3.9)	9.7 (3.3)	14.0 (3.0)	39.2 (2.9)	164.9 (8.8)	68.2 (2.6)	204.7 (6.6)	95.5 (3.2)	28.0 (0.8)	221.8
Rice	N.A.	N.A.	5.0 (1.0)	13.0 (1.0)	223.9 (12.0)	196.3 (7.4)	197.3 (6.4)	324.6 (10.7)	331.0 (10.0)	6520.0*
Fish & Fish Preparations	4.6 (2.0)	6.8 (2.3)	30.5 (6.7)	126.6 (9.4)	217.0 (11.6)	409.0 (15.4)	539.0 (17.4)	525.1 (17.3)	633.0 (19.0)	13660.9
Meat & Meat Preparations	N.A.	N.A.	3.1 (0.7)	10.3 (0.8)	55.5 (3.0)	73.8 (2.8)	75.5 (2.4)	85.5 (2.8)	94.0 (2.8)	2932.3
Fruits, Vegetables & Pulses Exclud. Cashew kernels, Processed Fruits & Juices	7.1 (372)	7.4 (2.6)	12.3 (2.7)	37.3 (2.8)	79.6 (4.2)	124.0 (4.7)	155.8 (5.0)	150.8 (5.0)	164.0 (4.9)	2209.9
Miscellaneous Processed Fruits	--	--	4.2 (0.9)	--	35.5 (1.9)	82.4 (3.1)	75.5 (2.4)	65.9 (2.2)	121.0 (3.7)	2781.0*
Total	222.0	289.8	455.7	1353.7	1873.2	2662.2	3104.4	3027.7	3315.0	

Note: Figures in bracket are the relative percentage
*indicates increase over 1970-71
**indicates %increase or decrease over 1960-61

1970-71 and 1988-89. Total earnings from export of fish and fish preparations recorded an overall rise of nearly 138 times. Total value of meat and meat preparations rose by more than 30.0 times between 1970-71 and 1988-89. Total value of fruits, vegetables and pulses export also registered an increase of 23.0 times during the period under study.

From the above analysis it has been clear that all the agricultural commodities have registered an increase in terms of export earnings between 1960-61 and 1988-89. Accordingly, the share of fish and fish preparations has enhanced by 17.0 percent followed by rice 8.9 percent, oil cakes 4.8 percent, coffee 43.0 percent, meat and meat preparations 2.1 percent, fruits, vegetables and pulses 1.8 percent and spices 1.0 percent during the periods 1960-61 to 1988-89. Whereas the share of tea and mate, tobacco, raw cotton, sugar and molases and cashew kernels in the total agricultural export earnings has decreased by 37.6 percent, 3.2 percent, 3.1 percent, 1.3 percent and 0.1 percent respectively during the same period. This indicates that the value of export has done fairly well as compared to volume of export due to higher unit value realisation of agricultural commodities in the international market.

Trends In Annual Average Compound Growth Rates:

Table 8 shows the trends in annual average compound growth rates in regard to exports of agricultural commodities (value) from India during 1960-65 to 1985-88.

Table 8 reveals that during 1960-65 sugar and molases recorded much better annual average compound growth rate as compared to the growth rate registered in case of cashew kernels, oil cakes, fish and fish preparations, coffee, spices, tobacco, raw cotton and fruit, vegetables and pulses. Whereas tea and mate registered negative compound growth rate during the same period. Between 1965 and 1970 the growth rate was highest in case of fisn and fish preparations followed by sugar and molases, coffee, spices, fruits, vegetables and pulses, oil cakes, tobacco, raw cotton, tea and mate and cashew kernels. During the periods 1970-75 all the agricultural commodities witnessed higher compound growth rate. Sugar and molases took the lead followed by fish and fish preparations, meat and meat preparations, fruits, vegetables and pulses, tobacco, raw cotton, coffee, rice, spices, cashew kernels, tea and mate and oil cakes.

During 1975-80 rice registered higher compound growth rate as compared to other commodities such as coffee, tea and mate, oil cakes, tobacco, cashew kernels, spices, raw cotton,

Table - 8

Trends In Annual Average Compound Growth Rates In Composition of Exports of Agricultural Commodities From India During 1960-65 to 1985-88

Commodities	1960-65	1965-70	1970-75	1975-80	1980-85	1985-88	1960-88
Coffee	7.0	14.2	21.6	26.3	4.3	1.9	13.0
Tea and Mate	-1.5	5.3	9.8	12.4	8.0	-1.5	5.8
Oil cakes	19.3	9.9	9.2	7.8	1.4	40.3	12.3
Tobacco	6.2	9.0	24.7	7.4	3.8	-9.0	7.8
Cashew kernels	20.2	3.8	11.0	7.8	9.9	7.2	10.0
Spices	6.8	10.9	12.8	10.4	19.4	Nil	10.7
Sugar and Molases	29.2	19.7	74.4	-39.0	-16.8	-23.8	2.7
Raw cotton	2.2	7.6	22.9	33.3	-16.2	-25.7	4.3
Rice	--	--	21.0	76.7	-2.6	19.0	--
Fish & Fish Preparations	8.1	35.0	32.9	11.4	13.5	15.7	19.2
Meat & Meat Preparations	--	--	27.1	40.0	5.9	8.4	--
Fruits, Vegetables and Pulses	0.8	10.7	24.8	16.4	9.2	9.8	11.9
Miscellaneous Processed Fruits	--	--	--	--	18.3	13.7	--

Source: Computed and compiled from Table-7.

fish and fish preparations, meat and meat preparations and fruits, vegetables and pulses. While sugar and molases recorded negative compound growth rate during the same period. During the period of 1980-85 also sugar and molases alongwith raw cotton and rice witnessed negative annual average compound growth rate. Whereas miscellaneous processed fruits have done fairly well as compared to other agricultural commodities. Between 1985 and 1988 the annual average compound growth rate was highest in case of oil cakes followed by rice, fish and fish preparations, miscellaneous processed fruits, fruits, vegetables and pulses, meat and meat preparations, casnew kernels and coffee. During the same period tea and mate, tobacco, sugar and molases and raw cotton registered negative compound growth rates. Similarly, if we see the annual average compound growth rate of the said commodities between 1960 and 1988, it was highest in case of fish and fish preparations followed by coffee, oil cakes, fruits, vegetables and pulses, spices, cashew kernels, tobacco, tea and mate, raw cotton and sugar and molases.

It can also be seen from table 8 that out of 13 commodities, 8 commodities namely coffee, oil cakes, cashew kernels, spices, fish and fish preparations, meat and meat preparations, fruits, vegetables and pulses and miscellaneous pro-

cessed fruits have registered conspicuous compound growth rates throughout the period of the study. The trends in annual average compound growth rates of tobacco and tea and mate have also been steady to some extent. Sugar and molases witnessed positive growth rates till 1970-75 and thereafter they registered negative growth rates. Similarly, raw cotton and rice registered fairly good compound growth rates till 1975-80 and thereafter the same had recorded negative growth rates.

Direction of Agricultural Exports:

India exports agricultural commodities to almost all over the world. Fifteen (15) major importing countries have been selected just to analyse the pattern of direction of exports between 1960-61 and 1988-89. These countries are U.S.S.R.. Czechoslovakia, G.D.R., Polland, U.S.A., Canada, F.R.G., U.K., Japan, Iran, Singapore, Sri Lanka, Bahrain, Kuwait, and Saudi Arabia. The first four countries namely U.S.S.R., Czechoslovakia, G.D.R. and Polland together accounted for more than 46 percent of the total quantity of agricultural commodities exported from India during 1988-89. Table 9 reveals the trends in country-wise export of agricultural commodities (quantity) from India during 1960-61 to 1988-89.[1]

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1. The figures depicted in the table 9, however, are not so accurate because of the frictions during compilation.

Table - 9

Trends In Country-wise Exports of Agricultural Commodities
From India during 1960-61 to 1988-89

Q = ('000 tonnes)

Country	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89	% Increase or decrease over 1960-61
U.S.A.	55.0	142.7	223.3	303.9	65.8	72.3	74.5	75.6	76.7	39.5
	(5.9)	(8.7)	(12.2)	(10.9)	(2.7)	(4.2)	(3.8)	(4.4)	(3.3)	
Canada	9.0	13.0	11.0	9.0	5.0	7.5	6.9	6.6	6.3	-30.0
	(1.0)	(0.8)	(0.6)	(0.3)	(0.2)	(0.4)	(0.4)	(0.4)	(0.3)	
U.S.S.R.	27.3	132.3	140.7	149.1	782.2	419.6	440.1	450.2	460.2	1585.7
	(2.9)	(8.0)	(7.7)	(5.4)	(32.1)	(24.3)	(22.6)	(26.3)	(20.0)	
Czechoslovakia	3.8	81.3	58.7	36.1	101.7	94.8	148.2	174.9	201.6	5205.0
	(0.4)	(5.0)	(3.2)	(1.3)	(4.2)	(5.5)	(7.6)	(10.2)	(8.7)	
G.D.R.	8.8	101.5	88.0	74.7	3.4	50.6	128.3	167.1	205.9	2240.0
	(0.9)	(6.2)	(4.8)	(2.7)	(0.1)	(2.9)	(6.6)	(9.8)	(8.9)	
Polland	40.0	105.8	202.4	298.4	182.9	153.9	177.3	189.0	200.7	401.8
	(4.3)	(6.5)	(11.0)	(10.7)	(7.5)	(8.9)	(9.1)	(11.0)	(8.7)	
F.R.G.	20.0	22.7	32.6	42.6	77.8	10.7	13.9	15.5	17.1	-14.5
	(2.1)	(1.4)	(1.8)	(1.5)	(3.2)	(0.6)	(0.7)	(0.9)	(0.7)	
U.K.	411.8	526.8	428.5	330.2	136.8	58.0	65.4	69.0	72.7	-82.3
	(43.9)	(32.2)	(23.3)	(11.9)	(5.6)	(3.4)	(3.4)	(4.0)	(3.2)	
Japan	57.1	57.7	107.3	157.0	58.2	27.3	47.7	57.9	68.0	19.0
	(6.1)	(3.5)	(5.8)	(5.6)	(2.4)	(1.6)	(2.5)	(3.4)	(2.9)	
Iran	5.2	3.4	-	396.6	48.0	1.9	23.0	33.5	44.0	746.2
	(0.6)	(0.2)		(14.2)	(2.0)	(0.1)	(1.2)	(2.0)	(1.9)	
Singapore	27.9	-	31.0	31.9	129.6	11.9	19.7	23.5	27.4	+1.8
	(3.0)		(1.7)	(1.1)	(5.3)	(0.7)	(1.0)	(1.4)	(1.2)	
Sri Lanka	109.5	35.1	40.0	12.8	44.2	2.6	9.2	12.6	15.9	-85.5
	(11.7)	(2.1)	(2.2)	(0.5)	(1.8)	(0.2)	(0.5)	(0.7)	(0.7)	
Bahrain	6.7	3.7	5.3	6.9	9.7	14.9	12.3	11.0	9.7	44.8
	(0.7)	(0.2)	(0.3)	(0.2)	(0.4)	(0.9)	(0.6)	(0.6)	(0.4)	
Kuwait	8.1	7.5	13.9	20.3	54.7	62.4	56.7	53.8	50.9	528.4
	(0.9)	(0.5)	(0.8)	(0.7)	(2.2)	(3.6)	(2.9)	(3.1)	(2.2)	
Saudi Arabia	2.9	1.6	12.8	24.0	111.1	125.0	154.3	168.9	183.6	6231.0
	(0.3)	(0.0)	(0.7)	(0.9)	(4.6)	(7.3)	(7.9)	(9.9)	(8.0)	
Others	145.7	505.7	442.4	892.2	623.9	610.7	567.1	201.5	665.5	356.8
	(15.5)	(30.9)	(24.0)	(32.0)	(25.6)	(35.4)	(29.2)	(11.8)	(28.9)	
Total	938.8	1635.0	1837.6	2786.2	2435.0	1724.1	1944.6	1710.6	2306.2	145.7

Source: Compiled From the Foreign Trade Statistics of India (various issues)
Published by D.G.C.I.&S Calcutta

Note: Table 9 indicludes only those commodities which are shown in table 5
Figures in brackets indicate the relative percentages.

Table 9 reveals that exports of agricultural commodities from India to U.S.A. has gone up by 1.4 times in 1988-89 over 1960-61. Whereas total agricultural exports to Canada has decreased by less than 1.0 time. Total agricultural exports to U.S.S.R. has significantly risen by nearly 17·0times. Similarly, total agricultural exports to Czechoslovakia went up by 53times. Total agricultural exports to G.D.R. increased by more than 23·0times. Total agricultural exports to Polland rose by 5·0times between 1960-61 and 1988-89. Whereas total agricultural exports to F.R.G. and U.K. declined by less than 1.0 time each during the same period. Total agricultural exports to Japan and Iran stood up by 1.2 times and 8.5 times respectively. Total exports of agricultural products to Singapore and Sri Lanka went down by less than 1.0 time each. However, agricultural exports from India to Bahrain, Kuwait and Saudi Arabia witnessed an overall rise of 1.4 times, 6.3 times and 63.3 times respectively between 1960-61 and 1988-89.

From the above discussion it is observed that the exports of agricultural commodities to different selected countries have shown mixed performance. Out of 15 countries, 10 have recorded an increase, while 5 countries have registered a decrease over the years under review. The countries to

which exports of agricultural commodities witnessed an overall rise are Saudi Arabia, Czechoslovakia, G.D.R., U.S.S.R., Iran, Kuwait, Polland, Bahrain, U.S.A. and Japan. Sri Lanka, U.K., Canada, F.R.G. and Singapore are the countries to which exports of agricultural commodities from India registered considerable decrease during the same period.

On evaluation of the relative shares of these countries in India's total agricultural exports, it is observed that U.S.S.R. increased its share by 17.0 percent followed by Czechoslovakia 8.3 percent, G.D.R. 8.0 percent, Saudi Arabia 7.7 percent, Polland 4.4 percent, Kuwait and Iran 1.3 percent each during the period 1960-61 to 1988-89. Whereas U.K., Sri Lanka, Japan, U.S.A., Singapore, F.R.G., Canada and Bahrain witnessed a decrease in their shares in India's total agricultural exports by 40.8 percent, 11.0 percent, 3.0 percent, 2.6 percent, 1.8 percent, 1.4 percent, 0.7 percent and 0.3 percent respectively during the same period. The decrease is alarming in case of the U.K.

Table 10 shows the trends in annual average compound growth rates in country-wise exports of agricultural commodities from India during 1960-65 to 1985-88.

It may be seen from table 10 that during 1960-65 exports of agricultural commodities to Czechoslovakia witnessed

Table - 10

Trends In Annual Average Compound Growth Rates in Country-wise Exports of Agricultural Commodities From India During 1960- 65 to 1985-88

Country	1960-65	1965-70	1970-75	1975-80	1980-85	1985-88	1960-68
U.S.A.	21.0	9.4	6.4	-26.4	1.9	2.0	1.2
Canada	7.6	-3.3	-3.9	-11-0	8.4	-5.6	-1.3
U.S.S.R.	37.1	1.2	11.7	39.3	-11.7	3.1	10.6
Czechoslovakia	84.5	-6.3	-9.3	23.0	-4.4	28.6	15.2
G.D.R.	63.0	-2.8	-3.2	-46.0	71.6	59.6	11.9
Polland	21.5	13.9	8.1	-9.3	-3.4	9.3	5.9
F.R.G.	2.6	7.5	5.5	82.6	-32.8	16.9	-0.6
U.K.	5.0	-4.0	-5.0	-16.2	-15.8	7.8	-6.0
Japan	0.2	13.2	7.9	-18.0	-14.0	35.6	0.6
Iran	-8.1	--	--	-34.4	-47.6	185.0	7.9
Singapore	--	--	0.6	32.4	-38.0	32.0	Nil
Sri Lanka	-20.4	2.6	-20.4	28.1	-43.3	82.9	-6.7
Bahrain	11.2	7.5	5.4	7.0	9.0	-13.3	1.3
Kuwait	-1.5	13.1	7.9	21.9	2.7	-6.6	6.8
Saudi Arabia	-11.2	51.6	13.4	35.9	2.4	13.7	16.0
Others	28.3	-2.6	15.0	-6.9	-0.4	2.9	5.6
Total	11.7	2.4	8.7	-2.7	-6.7	10.2	3.3

Source: Computed and Compiled from Table-9

exceedingly well compound growth rate as compared to the growth rate registered in case of exports to U.S.A., Canada, U.S.S.R., G.D.R., Polland, F.R.G., U.K., Japan and Bahrain. Whereas exports to Iran, Sri Lanka, Kuwait and Saudi Arabia recorded negative annual average compound growth rates during the same period. During the period 1965-70 exports to Saudi-Arabia recorded highest compound growth rate followed by exports to Polland, Japan, Kuwait, U.S.A., F.R.G., Bahrain, Sri Lanka and U.S.S.R.. While exports to Canada, Czechoslovakia, G.D.R. and the U.K. witnessed negative compound growth rates.

Between 1970 and 1975 exports to Saudi Arabia have done fairly well as compared to exports to U.S.A., U.S.S.R., Polland, F.R.G., Japan, Bahrain and Kuwait. During the same period exports to Canada, Czechoslovakia, G.D.R., U.K. and Sri Lanka have registered negative annual average compound growth rates. During the periods 1975-80 the growth rate in exports of agricultural products to F.R.G. was highest followed by U.S.S.R., Saudi Arabia, Singapore, Sri Lanka, Czechoslovakia, Kuwait and Bahrain, while the growth rates were negative in case of U.S.A., Canada, G.D.R., Polland, U.K., Japan and Iran.

During the period 1980-85 only 6 countries out of 15 namely U.S.A., Canada, G.D.R., Bahrain, Kuwait and Saudi Arabia

registered positive annual average compound growth rates. Rest of the countries showed negative compound growth rates during the same period. Between 1985 and 1988 exports to Iran registered much better compound growth rate as compared to the growth rates recorded by exports to any other country namely Sri Lanka, G.D.R., Japan, Singapore, Czechoslovakia, F.R.G., Saudi Arabia, Polland, U.K., U.S.S.R., and U.S.A.. During the same period Canada, Bahrain and Kuwait achieved negative annual average compound growth rates. So far as the annual average compound growth rates in agricultural exports to these countries between 1960 and 1988 are concerned, it has been highest in case of Saudi Arabia followed by Czechoslovakia, G.D.R., U.S.S.R., Iran, Kuwait, Polland, Bahrain and U.S.A.. During the same period Canada, F.R.G., U.K. and Sri-Lanka registered negative annual average compound growth rates.

Trends In Share of Agricultural And Spices Exports In India's Total Exports:

Agricultural exports have been playing a very significant role in the growth and development of the country by bringing adequate and valuable foreign exchange for the country's economy. India being an agricultural country has been exporting a large number of agricultural products to the world. Some of the agricultural commodities namely tea, coffee, cashew

tobacco and spices have a long history of being an export-oriented commodities. Agricultural and spices exports usually account for 16 to 36 percent and 1 to 3 percent of the total India's export earnings respectively. A clear picture of the same can be seen from the table 11 which shows the trends in total India's exports, trends in total agricultural exports and total spices exports between 1960-61 and 1988-89. The table also highlights the trends in share of agricultural and spices exports in total India's export earnings during the same period.

Data set out in table 11 show that the total export earnings of India has recorded an overall increase of nearly 32 times from 1960-61 to 1988-89. Total agricultural export earnings has also registered an overall rise of nearly 15 times. Similarly, the value of spices exports has witnessed an overall rise of more than 17 times during the same period. Table further indicates that the rate of increase in India's total export earnings is more than 2 times more than the rate of increase in India's total agricultural export earnings and nearly 2 times more than the total spices export earnings. This has been mainly because of higher rate of growth recorded by otner commodities as compared to the rate of growth registered in total agricultural and spices export earnings. As a

Table - 11

Trends In Total Exports, Agricultural Exports and Spices Exports from India And the Share of Agricultural and Spices Exports In Total India's Export Earnings during 1960-61 to 1988-89

V = (Rs. in crores)

Year	Total Exports	Agricultural Exports	Spices Exports	% share of agricultural Exports in total	% share of Spices in total
1960-61	642.3	222.0	16.4	34.6	2.6
1965-66	805.6	289.8	23.0	36.0	2.9
1970-71	1535.2	455.7	38.8	29.7	2.5
1975-76	3041.6	1353.7	72.7	44.5	2.4
1980-81	6710.7	1978.2	116.8	29.5	1.7
1981-82	7805.9	2221.1	92.5	28.5	1.2
1982-83	8803.4	2450.0	92.9	27.8	1.0
1983-84	9970.7	2621.7	111.7	26.3	1.1
1984-85	11743.7	2996.5	209.0	25.5	1.8
1985-86	10894.6	2662.2	282.5	24.4	2.6
1986-87	12451.8	3104.4	282.0	24.9	2.3
1987-88	15741.2	3027.7	298.0	19.2	1.9
*1988-89	20280.9	3315.0	282.8	16.3	1.4
% increase or decrease over 1960-61	3057.4	1393.3	1624.4	-18.3	-1.2

*Provisional Figures

Source: (i) Commerce (W) August 22-28, 1987, p-21
(ii) D.G.C. I & S Calcutta
(iii) Economic Surveys

CHART - 1

RELATIVE SHARE OF SPICES IN TOTAL INDIA'S EXPORTS(V)FROM 1960-61 TO1988-89

(IN %)

result, the share of agricultural and spices export earnings in India's total export earnings has dwindled by 18.3 percent and 1.2 percent (i.e. from 34.6 percent to 16.3 percent and 2.6 percent to 1.4 percent) respectively between 1960-61 and 1988-89 (Chart-1). It is also worth mentioning that the share of agricultural exports earnings in India's total export earnings has come down more rapidly than the share of total spices export earnings during the period under review.

Trends In Annual Average Compound Growth Rates:

Table 12 indicates the trends in annual average compound growth rates in India's total exports, total agricultural exports and total spices exports during 1960-65 to 1985-88.

It is seen from the table 12 that during 1960-65 value of spices exports recorded fairly well compound growth rate as compared to the growth rate witnessed by total export earnings and agricultural export earnings. During 1965-70 value of total exports registered highest compound growth rate followed by value of spices exports and value of agricultural exports. Between 1970 and 1975 the value of agricultural exports registered much better compound growth rate than value of total exports and value of total spices exports. During the periods 1975-80 the same trend prevailed as has been witnessed during 1965-70.

Table - 12

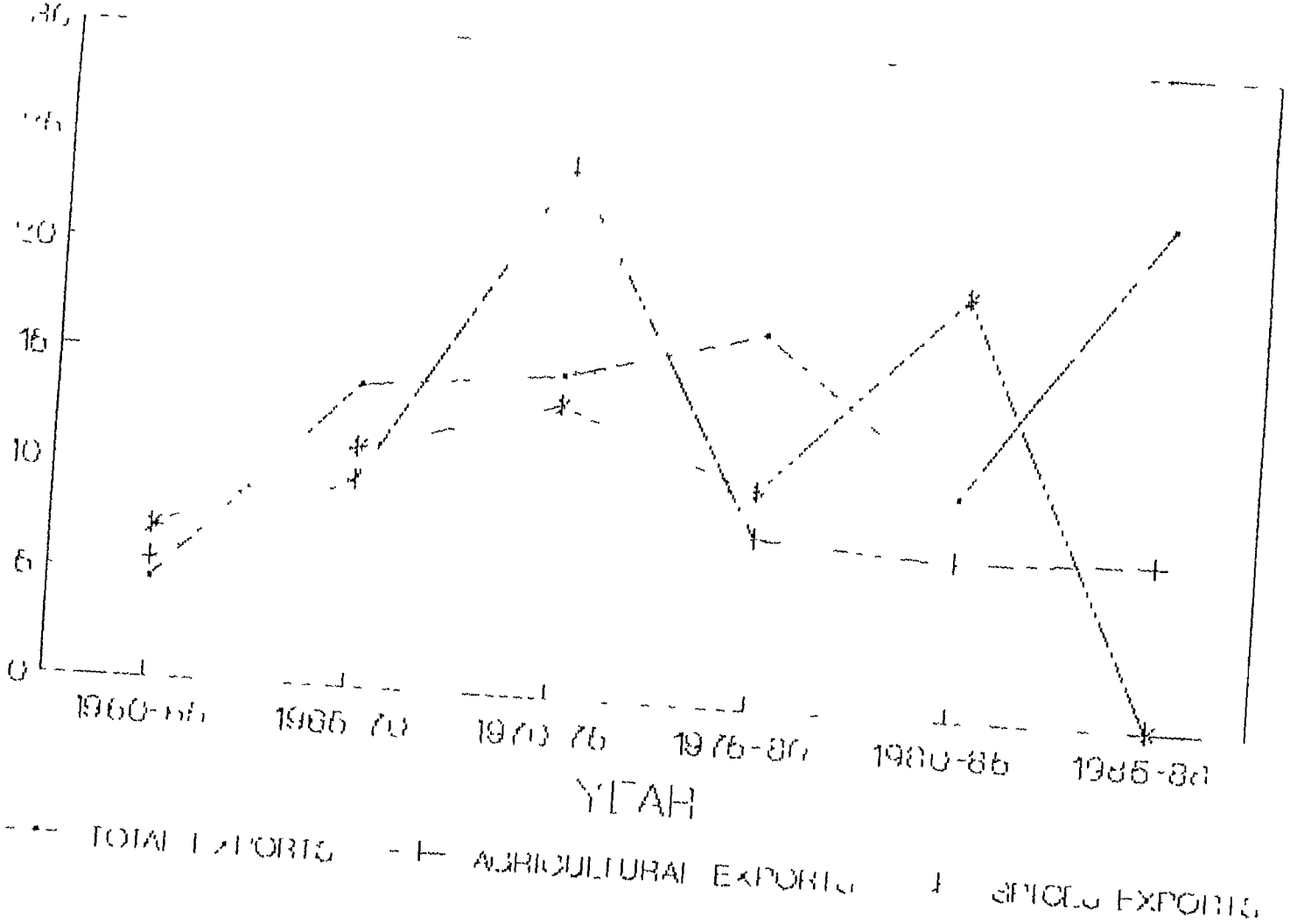
Trends In Annual Average Compound Growth Rates In India's Total Exports, Agricultural Exports And Spices Exports During 1960-65 to 1985-88

Year	Total Exports	Agricultural Exports	Spices Exports
	Annual Average compound growth Rates	Annual Average Compound Growth Rates	Annual Average Compound Growth Rates
1960-65	4.6	5.5	7.0
1965-70	13.8	9.5	11.0
1970-75	14.7	24.3	13.4
1975-80	17.1	7.9	10.0
1980-85	10.2	7.3	19.3
1985-88	23.0	7.6	Neg.
1960-88	13.1	10.1	10.7

Source: Computed And Compiled From Table-11

CHART - 2

ANNUAL AVERAGE COMPOUND GROWTH RATE IN INDIA'S TOTAL EXPORTS, AGRICULTURAL EXPORTS & SPICES EXPORTS



Between 1980-85 the value of total spices exports recorded highest annual average compound growth rate followed by value of total exports and value of total agricultural exports. Between 1985 and 1988 the value of total exports registered much better compound growth rate than the value of total agricultural exports. Whereas the growth rate was negligible in case of value of spices exports during the same period (Chart-2). As a whole, the value of total exports have done better than the value of agricultural exports and spices exports during the period 1960 to 1988.

Trends In Relative Share of Spices In India's Agricultural Exports:

Among the agricultural exports from India, spices have been one of the most important items of exports. It accounts for nearly Rs. 283 crores of foreign exchange earnings annually and thus contributes 8 to 10 percent of the total agricultural export earnings. Table 13 shows the trends in percentage share of spices in India's total agricultural exports from India during 1960-61 to 1988-89.

It is evident from the table 13 that the total agricultural export earnings have gone up by nearly 15 times during 1960-61 to 1988-89. Similarly, total export earnings from

Table - 13

Trends In Percentage Share of Spices Exports to Agricultural Exports of India During 1960-61 to 1988-89

V= (Rs. in crores)

Year	Agricultural Exports	Spices Exports	% share of spices in Agricultural Exports
1960-61	222.0	16.4	7.4
1965-66	289.8	23.0	7.9
1970-71	455.7	38.8	8.5
1975-76	1353.7	72.7	5.4
1980-81	1978.2	116.8	5.9
1981-82	2221.1	92.5	4.2
1982-83	2450.0	92.9	3.8
1983-84	2621.7	111.7	4.3
1984-85	2996.5	209.0	7.0
1985-86	2662.2	282.5	10.6
1986-87	3104.4	282.0	9.0
1987-88	3027.7	298.0	9.8
1988-89	3315.0	282.8	8.5
% Increase or decrease over 1960-61	1393.3	1624.4	1.1

Source: Same as Table-11

CHART - 3

RELATIVE SHARE OF SPICES IN INDIA'S(V) AGRICULTURAL EXPORTS FROM 1960-61TO88-89

(IN %)

spices have risen by more than 17 times during the same period. It means that the rate of increase in spices export earnings is higher than the rate of increase in total agricultural export earnings. This is mainly because of lesser growth rate in case of export earnings from other agricultural commodities as compared to the growth rate in spices export earnings. As a consequence, the share of spices in total agricultural export earnings has increased by 1.1 percent between 1960-61 and 1988-89 (Chart-3).

Trends In Annual Average Compound Growth Rates:

If we have a look at table 14, it appears that during 1960-65 the value of spices export has recorded fairly good compound growth rate as compared to the growth rate registered in case of value of agricultural export. The same trend witnessed during 1965-70 also. During 1970-75 the value of agricultural exports witnessed much better compound growth rate as compared to the value of spices export. Between 1975 and 1980 the growth rate was higher in case of value of spices exports as compared to the value of agricultural exports. During 1980-85 also spices exports recorded much higner annual average compound growth rate than agricultural exports. During the periods 1985-88 value of agricultural exports registered better compound growth rate, whereas the growth rate was negligible in case of spices exports. As a whole, spices exports have

Table - 14

Trends In Annual Average Compound Growth Rates In Agricultural and Spices Exports during 1960-65 to 1985-88

Year	Agricultural Exports	Spices Exports
	Annual Average Compound Growth Rates	Annual Average Compound Growth Rates
1960-65	5.5	7.0
1965-70	9.5	11.0
1970-75	24.3	13.4
1975-80	7.9	10.0
1980-85	7.3	19.3
1985-88	7.6	Neg.
1960-88	10.1	10.7

Source: Computed and Compiled from Table 13.

done fairly well as compared to agricultural exports as they have registered better annual average compound growth rate during the period under reference.

Conclusion:

From tne foregoing analysis, it has brought out that there has been a significant growth in world and India's agricultural exports between 1960 and 1988. However, the rate of increase in India's agricultural exports has been lower than the rate of rise in world's agricultural export. As a result, the share of India in world exports of agricultural commodities has declined considerably (2.0 percent to 0.8 percent) during the same period. Similarly, the share of agricultural exports in total India's exports has also decreased. As far as the composition of exports of agricultural commodities is concerned, it showed a considerable diversification over the years. During 1960-61 tea and mate, oil cakes and sugar and molases accounted for more than two-third of the country's total quantity exported, while during 1988-89 oilcakes, rice and fish and fish preparations were the items which accounted for two-third of the same. In case of value composition, the situation has been quite different. During the periods 1960-61 tea and mate alone accounted for about 56 percent of India's total agricul-

tural export earnings but during 1988-89 their share stood at only 18 percent. Another significant change has been that the marine products contributed about 2 percent of the total agricultural export earnings in 1960-61, while during 1988-89, they accounted for more than 19 percent. So far as the direction of agricultural exports of India is concerned, it witnessed a considerable shift in import pattern of different countries during the periods under review. During 1960-61 U.K., Sri Lanka, Japan, U.S.A. and Polland were the main importing destinations. However, U.K. and Sri Lanka together accounted for about 56 percent of the total agricultural exports of India , while during 1988-89 their shares stood at only 3.9 percent. Another major diversification which took place has been that during 1960-61 U.S.S.R., Czechoslovakia, G.D.R., Polland and Saudi Arabia accounted for only 12.2 percent of the total India's agricultural exports, whereas during 1988-89 these countries imported more than 36 percent of the total India's agricultural exports. It has also brought out that the contribution of spices to the agricultural export earnings has also been increasing in an impressive manner. It is also essential that exports of spices should be used as a tool for augmenting the existing level of agricultural export earnings and consequently the total export earnings specially when the foreign exchange is badly needed for financing import bill and also for overcoming the balance of payments crisis.

Chapter - IV

EXPORT PERFORMANCE OF INDIAN SPICES

Chapter - IV

EXPORT PERFORMANCE OF INDIAN SPICES

India is considered as the home of spices as no country in the world grows as many kinds of spices as India. It has a prime position in the global exports of spices. After meeting domestic needs, it exports substantial quantities of spices to different countries of the world. During the decade of the 1960s India was constituting more than 40 percent of the total volume of world's spices exports. However, its performance has been dwindling and as a result, the same has gone down to nearly 20 percent in the decade of 1980s.[1] This nas been mainly because of the emergence of other countries in spices trade horizon.

It is true that the exports of Indian spices have been increasing steadily in respect of quantity and value. The contribution made by the exports of spices to the national exchequer varies between 1 to 3 percent of the total export earnings of India. However, in 1988-89 the share of spices in total export earnings of India stood at 1.4 percent. Similarly, spices accounted for nearly 8 percent of the total agricultural export earnings. In 1988-89 value realised from the exports of spices was Rs. 282.8 crores. Out of which pepper alone constituted

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1. Spices Board (Cochin) status paper on spices, 1988, p.1

Rs. 187.8 crores i.e. 66.4 percent of total followed by turmeric Rs. 17.4 crores (6.2 percent), chillies Rs. 12.6 crores (4.3 percent), small cardamom Rs. 10.3 crores (3.6 percent), and ginger Rs. 9.2 crores (3.3 percent). As far as the quantum of spices export is concerned, pepper alone accounted for 41.0 thousand tonnes i.e. 43.4 percent of the total followed by turmeric 16.5 tnousand tonnes (17.5 percent), chillies 5.4 thousand tonnes (5.7 percent), ginger 5.1 thousand tonnes (5.4 percent) and small cardamom 0.8 thousand ton (0.9 percent). With these observations, the present chapter analyses the trends in world export of spices and the relative share of India in world export of spices. It also analyses the trends in exports of spices, (quantity, value and unit value) from India. It further examines the trends in composition of spices exported (quantity and value) from India, trends in relative share of export to total production of spices, demand pattern of spices and the trends in country-wise export (direction) of spices from India.

Trends In World Exports:

Table 1 gives the trends in world exports of spices from 1970 to 1988.[1] It also shows the trends in relative share of India in world export of spices during the same period.

Data set out in table 1 show that the world export of spices in 1988 was US $ 1474 million, while it was US $

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1. Data prior to 1970 are not available

Table - 1

Trends In Relative Share of India In World Export of spices from 1970 to 1988

V = (Million US dollar)

Year	World	India	% share of India
1970	255	52	20.5
1975	548	73	13.3
1980	1072	156	14.5
1985	1059	92	8.7
1986	1349	229	17.0
1987	1504	151	10.0
1988	1474	144	9.8
% Increase/ decrease over 1970	478.0	176.9	-10.7

Source: Economic Survey (various Issues) Pub;, Government of India

Table - 2

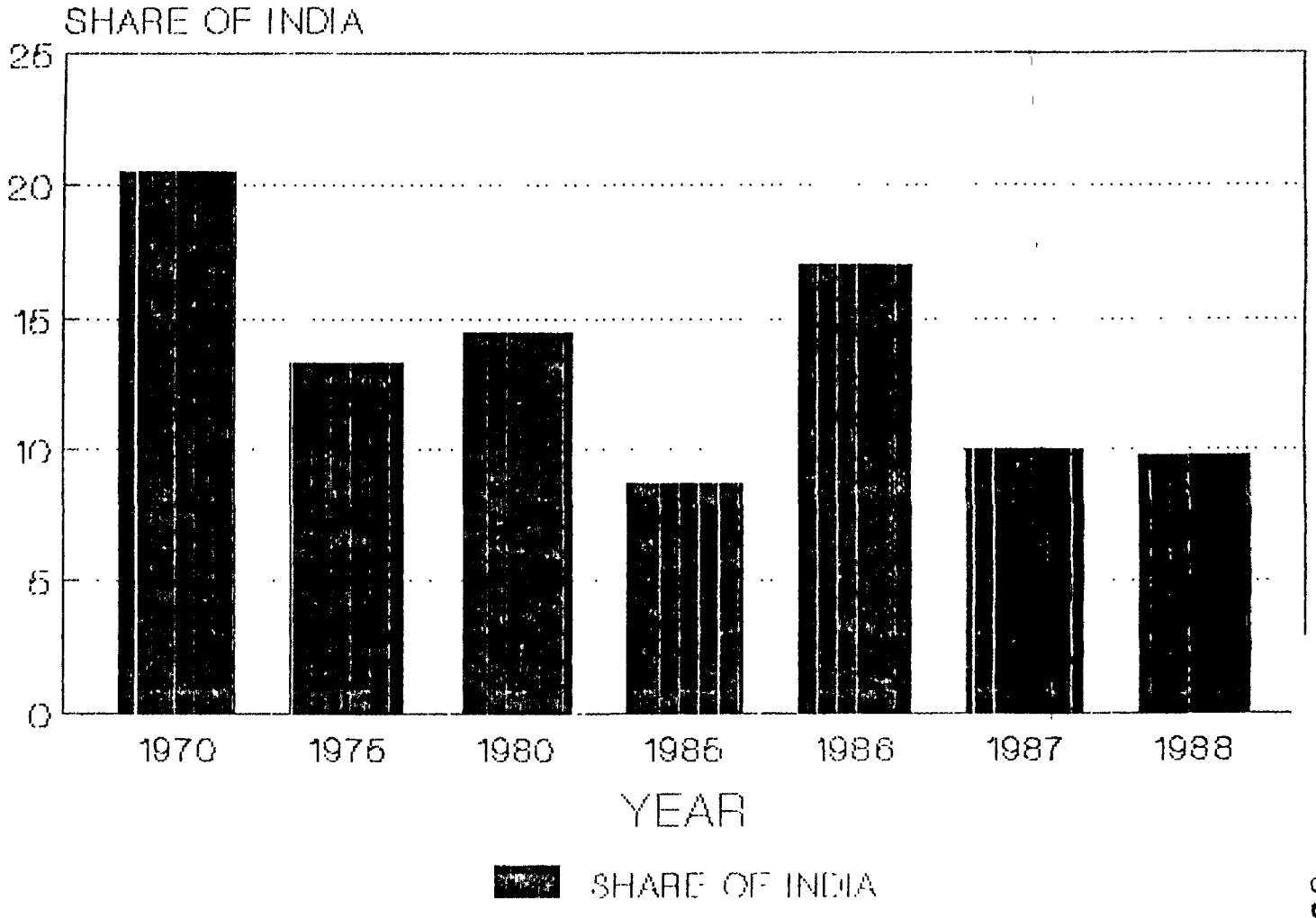
Trends In Annual Average Compound Growth Rates In World and India's Exports of Spices During 1970-75 to 1985-88

Year	World Annual Average Compound Growth Rates	India Annual Average Compound Growth Rates
1970-75	16.5	7.0
1975-80	14.4	16.4
1980-85	-0.2	-10.0
1985-88	11.7	16.1
1970-1988	10.2	5.8

Source: Computed and compiled from Table-1
Note: Data prior to 1970-75 are not available.

CHART - 1

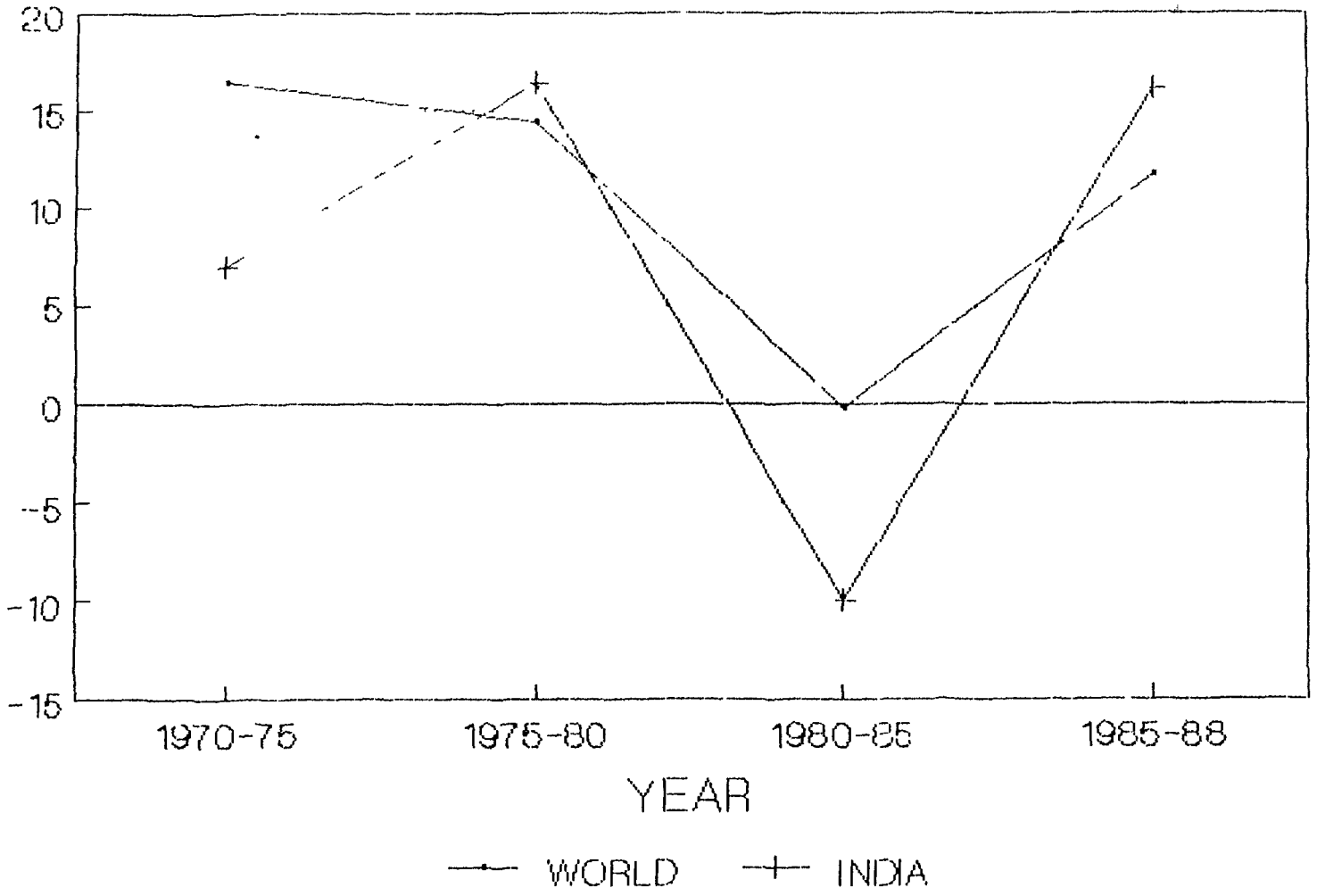
RELATIVE SHARE OF INDIA IN WORLD EXPORT (VALUE) OF SPICES BETWEEN 1970 & 1988



(IN %)

CHART - 2

ANNUAL AVERAGE COMPOUND GROWTH RATE OF WORLD & INDIA'S EXPORT OF SPICES



255 million during 1970. The figures given above show that over a period of 18 years there has been an increase of 5.8 times. Similarly, the export of spices from India witnessed an overall increase of 2.8 times i.e. from US $ 52 million to US $ 144 million during the same period. It means that the rate of increase in world export of spices is much higher than the rate of rise in export of spices from India. Consequently, the share of India in world export of spices went down by 10.7 percent (i.e. from 20.5 percent to 9.8 percent) during the period under review (Chart-1). This has been mainly because of higher growth in export of spices from other spices exporting countries as compared to India.

Trends In Annual Average Compound Growth Rates:

Table 2 indicates the annual average compound growth rates of world and India's exports of spices from 1970-75 to 1985-88.

Data set out in table 2 reveal that world has done fairly well and as a result the compound growth rate was fairly high as compared to the growth rate recorded by India's exports of spices during 1970-75. However, during 1975-80 India registered better compound growth rate as compared to the world. The period 1980-85 was the worst period for world and India as both have recorded negative compound growth rates.

Between 1985 and 1988 India has done well as compared to world as the exports of spices from India recorded higher compound growth rate than the world (Chart-2). On the whole, (between 1970 and 1988) world has recorded better annual average compound rate as compared to India.

From the analysis of table 1 and 2 it has been clear that the performance of India in regard to exports of spices has not been satisfactory when it is compared to the world and thus it has been losing its share in world export of spices.

Trends In India's Exports:

India is a land of spices and the spices of India are known all over the globe for its finest quality. Though, the share of India in world export of spices has declined during the decade of 1980s, however, it accounted for 10 to 20 percent of the total world spices export earnings. As far as the share of spices in total export earnings of India is concerned, on an average, it constituted nearly 2 percent. (Table 11, Chapter-II). Similarly, spices constituted more than 8 percent of the total agricultural export earnings of India (Table 13, Chapter-II).

If we throw a glance at the tables 11 and 13 in Chapter II, it appears that total export earnings of India

nas recorded an overall increase of 31.6 times between 1960-61 and 1988-89. Similarly, the export earnings from agricultural commodities witnessed an overall rise of 14.9 times during the same period. Likewise, export earnings from spices went up by 17.2 times during the period under study. It means that the rate of increase in export earnings from spices is much lower than the rate of rise in total India's export earnings. But when it is compared with the rate of increase in export earnings from the agricultural commodities, it is seen that the rate of increase in export earnings from spices is higher than the rate of increase in agricultural export earnings. This has been mainly because of low growth rate witnessed in the export of other agricultural commodities and their unit value realisation.

Table 3 shows the trends in exports of spices from India (quantity, value and unit value) from 1960-61 to 1988-89.

It is evident from table 3 that the total quantity of spices exported has recorded an overall increase of more than 2 times. Similarly, total value earned from exports of spices went up by more than 17 times. It means that the rate of increase in total earnings from exports of spices are higher than the rate of increase in quantity exported. This has been due to higher unit value realisation which recorded a rise of morethan

Table - 3

Trends In Exports of Spices From India
During 1960-61 to 1988-89

Q = ('000 tonnes)
V = (Rs. crores)

Year	Quantity	Value	Unit Value (Rs./Kg.)
1960-61	45.7	16.4	3.59
1965-66	62.5	23.0	3.68
1970-71	47.9	38.8	8.10
1975-76	62.0	72.7	11.73
1980-81	92.5	116.8	12.63
1981-82	68.4	92.5	13.5
1982-83	75.1	92.9	12.37
1983-84	85.8	111.7	13.02
1984-85	89.2	209.0	23.43
1985-86	74.5	282.5	37.9
1986-87	82.8	282.0	34.06
1987-88	70.3	298.0	42.39
1988-89*	94.4	282.8	29.96
% Increase/ decrease over 1960-61	106.6	1624.4	734.5

*Provisional figures

Source: Upto 1980-81; DGCI&S, Calcutta.
1981-82 and onwards; Customs list, Spices Board, Cochin.

8 times. It is pertinent to point out here that trends in quantity exported and value earned have been erratic and stability has been the missing link.

Trends In Annual Average Compound Growth Rates:

Table 4 is an indicative of the trends in annual average compound growtn rates in volume of export, value of export and unit value of exports from 1960-65 to 1985-88.

It is clear from the table 4 that during 1960-65 annual average compound growth rate was highest in case of value of export followed by volume of export and unit value of export. In otner words, unit value of export recorded almost negligible compound growth rate during the same period. Whereas between 1965 and 1970 unit value of export recorded better compound growth rate as compared to the rate of growth recorded by value of export. While volume of export witnessed negative compound growth rate during the same period. During 1970-75 the annual average compound growth rate was highest in case of value of export followed by unit value of export and volume of export. In the years 1975-80 also value of export has done fairly well as compared to the volume of export and unit value of export. During the periods 1980-85 volume of export has witnessed negative compound growth rate. Whereas annual average compound growth rate was much higher in case of

Table - 4

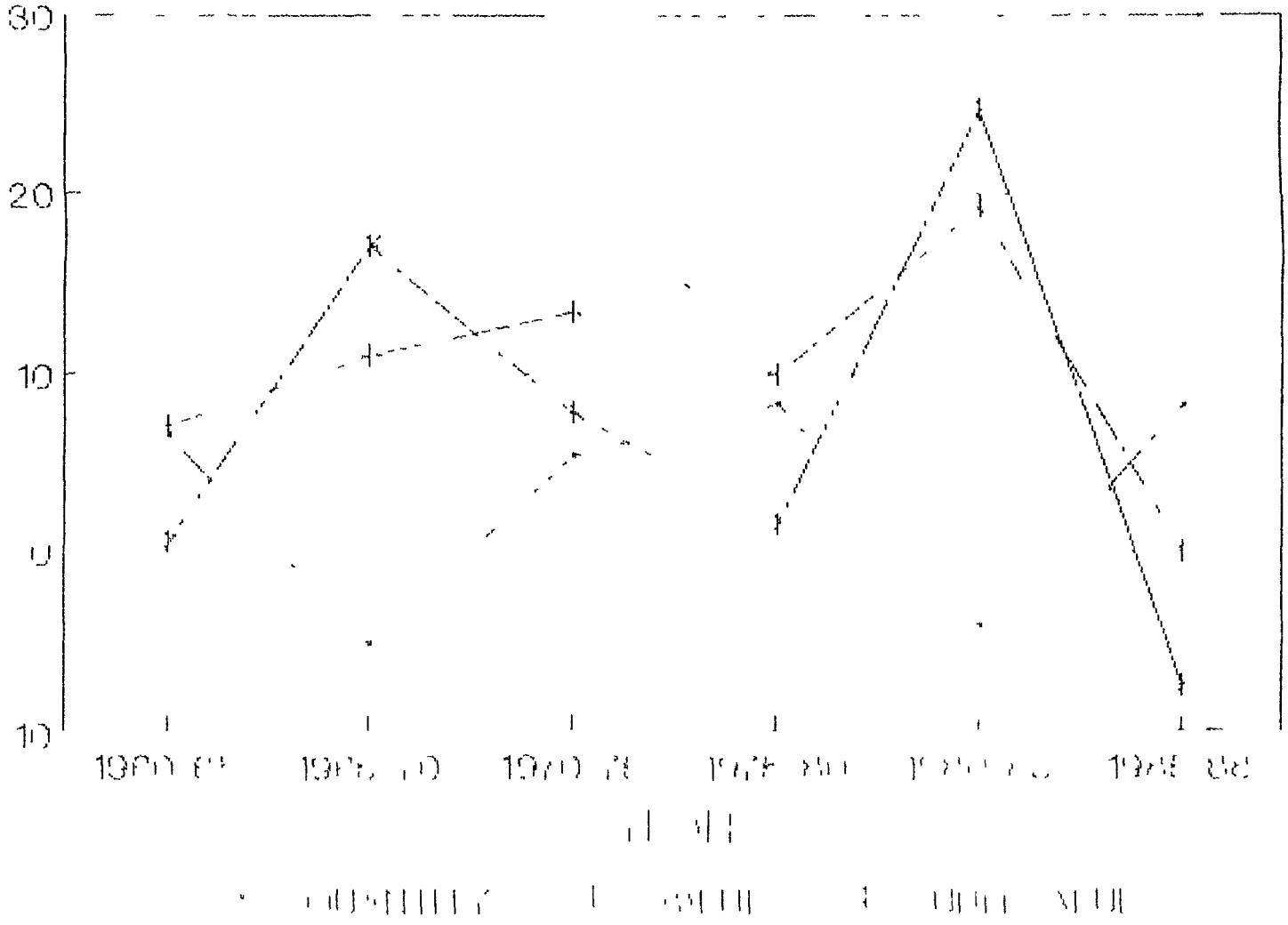
Trends In Annual Average Compound Growth Rates In Exports of Spices (Quantity, Value and Unit Value) From India During 1960-65 to 1985-88

Year	Quantity Annual Average compound Growth Rates	Value Annual Average Compound Growth Rates	Unit Value Annual Average Compound Growth rates
1960-65	6.5	7.0	0.5
1965-70	-5.2	11.0	17.1
1970-75	5.3	13.4	7.7
1975-80	8.3	10.0	1.5
1980-85	-4.2	19.3	24.6
1985-88	8.2	Neg.	-7.5
1960-88	2.6	10.7	7.9

Source: Computed and Compiled from Table -3

CHART - 3

ANNUAL AVERAGE COMPOUND GROWTH RATE IN INDIA'S EXPORT OF SPICES



unit value realisation of export as compared to the total value of export. Between 1985 and 1988 volume of export has recorded exceedingly higher compound growth rate as compared to the growth rate recorded by value of export. As a matter of fact, value of export witnessed negligible compound growth rate. Whereas unit value of export registered negative compound growth rate during the same period (Chart-3). On the whole, value of export has done well as compared to volume of export and unit value of spices export as it has recorded highest compound growth rate during 1960 to 1988.

Trends In Composition of Exports:

Though, India exports about 20 items of spices, but the spices which are exported in bulk or account for a considerable amount of foreign exchange are pepper, cardamom(small), cardamom (large) chillies, ginger, turmeric, garlic, curry powder, seed spices (coriander, cumin, fennel,fenugreek and celery) spice oils and spice oleoresins.However, the export of oils and oleoresins got momentum very recently.[1] Table 5 shows the trends in composition of exports of spices (quantity) from India during 1960-61 to 1988-89.

It is evident from the table 5 that total volume of pepper export has recorded an overall increase of more than

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1. Status Paper on Spices (1988), op. cit, p.3.

Table - 5

Trends in Composition of Exports of Spices (Quantity) from India during 1960-61 to 1988-89

Q = ('000 tonnes)

Commodities	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89*	1960-61**
Pepper	17.2 (37.6)	26.3 (42.2)	18.0 (37.6)	24.2 (39.0)	25.3 (27.4)	37.6 (50.5)	37.0 (44.7)	41.0 (58.3)	41.0 (43.4)	138.4
Cardamom (small)	2.0 (4.4)	1.4 (2.2)	1.7 (3.6)	1.9 (3.0)	2.3 (2.5)	3.2 (4.3)	1.4 (1.7)	0.3 (0.4)	0.8 (0.9)	-60.0
Cardamom (Large)	N.A.	N.A.	-	-	0.3 (0.3)	0.4 (0.5)	0.2 (0.3)	0.2 (0.3)	0.4 (0.4)	--
Chillies	8.4 (18.4)	9.5 (15.2)	2.1 (4.4)	3.5 (5.7)	7.7 (8.3)	1.2 (1.6)	4.3 (5.2)	6.1 (8.7)	5.4 (5.7)	-35.7
Ginger	5.6 (12.2)	3.9 (6.2)	3.1 (6.5)	4.8 (7.7)	5.6 (6.0)	6.8 (9.1)	4.8 (5.8)	2.6 (3.7)	5.1 (5.4)	- 8.9
Turmeric	2.3 (5.0)	10.4 (16.6)	11.1 (23.2)	11.7 (18.9)	11.4 (12.3)	8.6 (11.5)	19.5 (23.6)	8.7 (12.4)	16.5 (17.5)	617.4
Garlic	2.0 (4.4)	0.8 (1.3)	1.6 (3.3)	0.9 (1.5)	7.4 (8.0)	2.6 (3.5)	0.6 (0.7)	0.2 (0.3)	4.2 (4.5)	110.0
Curry Powder	1.3 (2.8)	1.6 (2.6)	1.8 (3.8)	1.3 (2.1)	2.6 (2.8)	2.5 (3.4)	2.7 (3.3)	2.6 (3.7)	2.7 (2.9)	17.7
Seed Spices	6.7 (14.7)	8.3 (13.3)	7.7 (16.0)	7.6 (12.3)	20.0 (21.6)	9.3 (12.5)	9.7 (11 7)	7.3 (10.4)	16.8 (17.8)	150.7
Spice Oils	N.A.	N.A.	Neg.	Neg.	0.01 (Neg.)	0.05 (Neg.)	0.04 (Neg.)	0.05 (Neg.)	0.04 (Neg.)	--
Spice Oleoresins	N.A.	N.A.	Neg.	0.04 (Neg.)	0.1 (Neg.)	0.4 (0.5)	0.4 (0.5)	0.4 (0.6)	0.5 (0.5)	--
Other Spices	0.2 (0.4)	0.3 (0.5)	0.8 (1.7)	6.1 (9.8)	14.9 (16.1)	1.8 (2.4	2.2 (2.7)	0.9 (1.3)	0.9 (1.0)	350.0
Total	45.7	62.5	47.9	62.0	92.5	74.5	82.2	70.3	94.4	106.6

*Provisional Figures,
**% Increase or Decrease over 1960-61
Figures in brackets are percentages to total
NA: Not Available
Neg: Negligible
a: It includes coriander, cumin, Fennel, Fenugreek and celery
Source: Compiled from DOCI & S, Calcutta (Various Issues)

2 times between 1960-61 and 1988-89. While total export of cardamom (small) has witnessed a decline of less than 1.0 time. Total export of cardamom (large) has registered an overall increase of more than 1.0 time during 1980-81 to 1988-89.[1] However, total export of chillies has gone down by less than 1.0 time during the said period. Similarly, total volume of ginger export has declined by less than 1.0 time. Whereas total export of turmeric has risen by more than 7 times. Total export of garlic has also gone up by more than 2 times. Total export of curry powder has stood up by more than 2 times. Similarly, total export of seed spices has recorded a rise of nearly 3 times. Total export of spice oils and oleoresins has also registered an overall increase of 4 times and nearly 13 times respectively during the period under review.

This all shows that turmeric has registered highest increase i.e. 7 times in case of quantity exported followed by seed spices 2.5 times, pepper 2.0 times, garlic 2.0 times and curry powder 2.0 times during the period 1960-61 to 1988-89. While other spices like cardamom (small) has recorded highest decrease 0.4 time followed by chillies 0.6 time and ginger 0.9 time during the same period. Similarly, the relative

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1. Data from 1960-61 to 1975-76 are not available.

share of turmeric has increased by 12.5 percent followed by pepper 5.8 percent, seed spices 3.1 percent, garlic 0.1 percent and curry powder 0.1 percent during the period under review. While the share of chillies, ginger and cardamom (small) has decreased by 12.7 percent, 6.8 percent and 3.5 percent respectively.

It is also evident that chillies, ginger and cardamom (small) are lagging far behind from other spices which are under study. Therefore, concerted efforts are to be made to increase the exports of these spices specially chillies, ginger and cardamom(small) as they are important foreign exchange earners.

Trends In Annual Average Compound Growth Rates:

Table 6 shows the trends in annual average compound growth rate in composition of export of spices (quantity) from India during 1960-65 to 1985-88.

It is seen from the table 6 that during 1960-65 the annual average compound growth rate was much higher in case of turmeric export as compared to the growth rates in pepper, seed spices, curry powder and chillies. While garlic, ginger and cardamom (small) as per order witnessed negative compound growth rate during the same period. During the periods 1965-70 garlic has done fairly well as compared to cardamom (small), curry powder and turmeric. Whereas chillies, pepper, ginger

Table - 6

Trends In Annual Average Compound Growth Rates In Composition of Exports of Spices from India During 1960-65 to 1985-88

Commodities	1960-65	1965-70	1970-75	1975-80	1980-85	1985-88	1960-88
Pepper	8.9	-7.3	6.0	0.9	8.2	2.9	3.2
Cardamom (Small)	-6.9	4.0	2.2	3.9	6.8	-37.0	-3.2
Cardamom (Large)	-	-	-	-	5.9	Nil	-
Chillies	2.5	-26.0	10.8	17.0	-31.0	65.0	-1.6
Ginger	-7.0	-4.5	9.1	3.1	4.0	-9.1	-0.3
Turmeric	35.2	1.3	1.0	-0.5	5.5	24.3	7.3
Garlic	-16.7	14.9	-10.9	52.4	-18.9	17.3	2.7
Curry Powder	4.2	2.4	-63.0	14.8	-0.8	2.6	2.6
Seed Spices	4.4	-1.5	-0.3	21.4	-14.2	21.8	3.3
Spice Oils	-	-	-	-	38.0	-7.2	-
Spice-Oleoresins	-	-	-	20.1	32.0	7.7	-
Other Spices	8.4	21.7	50.1	19.6	-34.7	-20.6	5.5
Total	6.5	-5.2	5.3	8.3	-4.2	8.2	2.6

Source: Computed and Compiled from Table - 5

and seed spices respectively showed negative compound growth rate during the same period.

Between 1970 and 1975 chillies have recorded highest compound growth rate followed by ginger, pepper, cardamom (small) and turmeric. The compound growth rate was negative in case of curry powder, garlic and seed spices respectively. During the period 1975-80 garlic has registered exceedingly higher compound growth rate as compared to the rate of growth recorded by seed spices, spice-oleoresins, chillies, curry powder, cardamom (small), ginger and pepper. Turmeric is the only commodity which witnessed negative compound growth rate during the same period.

In the years 1980-85 spices oils witnessed highest compound growth rate followed by spice-oleoresins, pepper, cardamom (small), cardamom (large) and ginger. While chillies, garlic, seed spices, turmeric and curry powder registered negative annual average compound growth rate during the same period. Between 1985 and 1988 cardamom (small) witnessed highest negative compound growth rate followed by ginger and spice oils. Whereas chillies registered exceptionally high positive compound growth rate followed by turmeric, seed spices, garlic, spice-oleoresins, pepper and curry powder. On the whole, turmeric recorded much better annual average compound growth rate as compared to the growth rate registered in seed spices,

pepper, garlic and curry powder. Whereas the growth rates were negative in case of cardamom (small), chillies and ginger export during the same period.

From the above analysis it is observed that the trends in annual average compound growth rates in regard to quantity exported have been fluctuating in all spices which are under review during the period 1960-65 to 1985-88. It is surprising to note here that spice-oleoresins is the only commodity which has witnessed positive compound growth rate during the entire period of export i.e. 1975-80 to 1985-88. Pepper is the next commodity which recorded positive compound growth rate throughout the period of study except 1965-70. The annual average compound growth rates were highly fluctuating in case of ginger, garlic and seed spices. Whereas cardamom(small), chillies, turmeric and curry powder are the other spices whose compound growth rates were faltering.

Table 7 shows the trends in composition of exports of spices (value) from India during 1960-61 to 1988-89.

It is observed from the table 7 that the total export of pepper witnessed an overall increase of 22 times during 1960-61 to 1988-89. Total earnings from export of cardamom(small) rose by nearly 3 times. Total export earnings from cardamom

Table - 7

Trends In Composition of Exports of Spices (Value) From India During 1960-61 to 1988-89

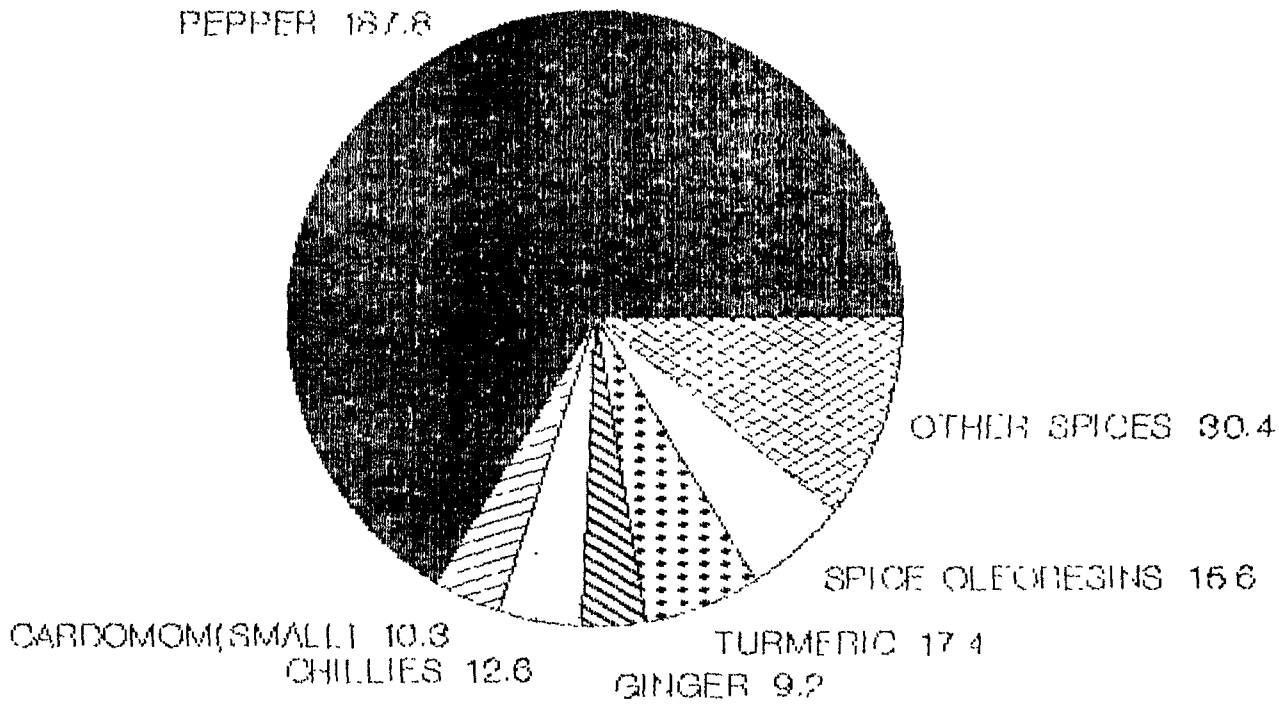
V = (Rs. crores)

Commodities	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89*	1960-61**
Pepper	8.5	11.1	15.2	33.9	36.8	172.5	200-3	240.6	187.8	2109.4
	(51.8)	(48.2)	(39.2)	(46.5)	(31.4)	(61.0)	(71.0)	(80.7)	(66.4)	
Cardamom (Small)	3.7	4.4	11.2	19.4	34.5	53.5	18.5	3.4	10.3	178.4
	(22.6)	(19.1)	(28.9)	(26.7)	(28.5)	(18.9)	(6.6)	(1.1)	(3.6)	
Cardamom (Large)	-	-	-	-	0.5	1.8	0.9	0.7	1.9	-
					(0.5)	(0.6)	(0.3)	(0.2)	(0.7)	
Chillies	1.8	2.5	1.0	3.2	5.0	2.0	5.0	8.3	12.6	600.0
	(1.8)	(2.5)	(1.0)	(3.2)	(5.6)	(2.0)	(4.9)	(8.3)	(4.3)	
Ginger	0.9	1.3	2.6	4.1	2.9	10.9	5.7	4.9	9.2	922.2
	(4.9)	(5.7)	(6.7)	(5.6)	(2.5)	(3.8)	(2.0)	(1.6)	(3.3)	
Turmeric	0.3	1.4	3.8	4.2	6.0	12.01	19.2	9.2	17.4	5700.0
	(1.2)	(6.0)	(9.8)	(5.8)	(5.1)	(4.2)	(6.8)	(3.0)	(6.2)	
Garlic	0.1	0.07	0.30	0.3	1.9	1.4	0.5	0.2	2.4	2300.0
	(0.7)	(0.3)	(0.7)	(0.4)	(1.6)	(0.5)	(0.2)	(Neg)	(0.8)	
Curry Powder	0.4	0.50	0.8	1.1	2.2	3.7	4.1	4.4	5.0	1150.0
	(2.2)	(2.2)	(2.1)	(1.5)	(1.9)	(1.3)	(1.5)	(1.5)	(1.8)	
Seed Spices[a]	0.8	0.2	3.4	4.5	15.4	8.4	10.3	9.8	17.4	2075.0
	(511)	(7.7)	(8.7)	(6.1)	(13.1)	(3.0)	(3.7)	(3.3)	(6.2)	
Spice Oils	-	-	0.01	0.07	0.5	0.5	2.9	2.7	2.7	-
	(Neg)		(Neg)	(Neg)	(0.4)	(0.2)	(1.0)	(0.9)	(0.9)	
Spice Oleoresins	-	-	0.01	0.5	2.2	10.2	11.9	12.3	15.6	-
			(Neg)	(0.7)	(1.9)	(3.5)	(4.2)	(4.1)	(5.5)	
Other Spices	0.2	0.05	0.4	1.6	9.1	5.9	2.5	1.6	1.0	400.0
	(1.4)	(0.2)	(0.9)	(2.2)	(7.8)	(2.1)	(0.9)	(0.5)	(0.4)	

* Provisional figures
N.A.: Not Available
Neg.: Negligible
**Percentage Increase or Decrease over 1960-61.
a : It includes Coriander, Cumin, Fenugreek, Celery and Fenel.
Source: Same as table -3

CHART - 4

COMPOSITION OF SPICES EXPORTS FROM INDIA DURING 1988-89



V-(RS.crores)

(large) went up by nearly 4 times between 1980-81 and 1988-89.[1] Total export earnings of chillies recorded an overall rise of nearly 7 times. Total earnings from the export of ginger registered an increase of more than 10 times. Total earnings from the export of turmeric went up by 58 times during the period 1960-61 to 1988-89. Total export earnings of garlic, curry powder and seed spices stood up by 24 times, 13 times and 22 times respectively during the same period. Total export earnings of spice oils and spice oleoresins recorded an overall increase of 27 times and 31 times respectively during the period 1970-71 to 1988-89.

From the above discussions it has been inferred that all the spices have recorded an increase in terms of export earnings during 1960-61 to 1988-89. However, turmeric has registered overall increase (58 times), followed by garlic (24 times), pepper (22 times), seed spices (22 times), curry powder (13 times), ginger (10 times), chillies (7 times) and cardamom (small) (3 times) during the same period. Accordingly, the share of pepper has increased by 14.6 percent followed by turmeric 5 percent, chillies 2.5 percent, seed spices 1.1 percent and garlic 0.1 percent between 1960-61 and 1988-89. While the

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1. The export of cardamom (Large) has emerged as an important foreign exchange earner in the decade of the Eightees.

share of cardamom (small), ginger and curry powder has declined by 19 percent, 1.6 percent and 0.4 percent respectively during the same period.

On overall evaluation of the growth in export earnings from spices and their shares in total export earnings from all spices, it is observed that the performance of cardamom(small) ginger and curry powder has been highly erratic and they have not been able to compete with other spices.

Better picture of composition of spices exports from India during 1988-89 can be seen from Chart-4.

Trends In Annual Average Compound Growth Rates:

Table 8 shows the trends in annual average compound growth rate in composition of exports of spices (value) from India 1960-65 to 1985-88.

If we analyse data given in table 8, it appears that during 1960-65 turmeric has recorded highest compound growth rate followed by seed spices, ginger, chillies, curry powder, pepper and cardamom (small). While garlic has got negative annual average compound growth rate during the same period. Between 1965 and 1970 garlic has done exceptionally well as compared to turmeric, cardamom (small) ginger, seed spices, curry powder and pepper. Whereas chillies witnessed negative compound growth rate during the same period.

Table - 8

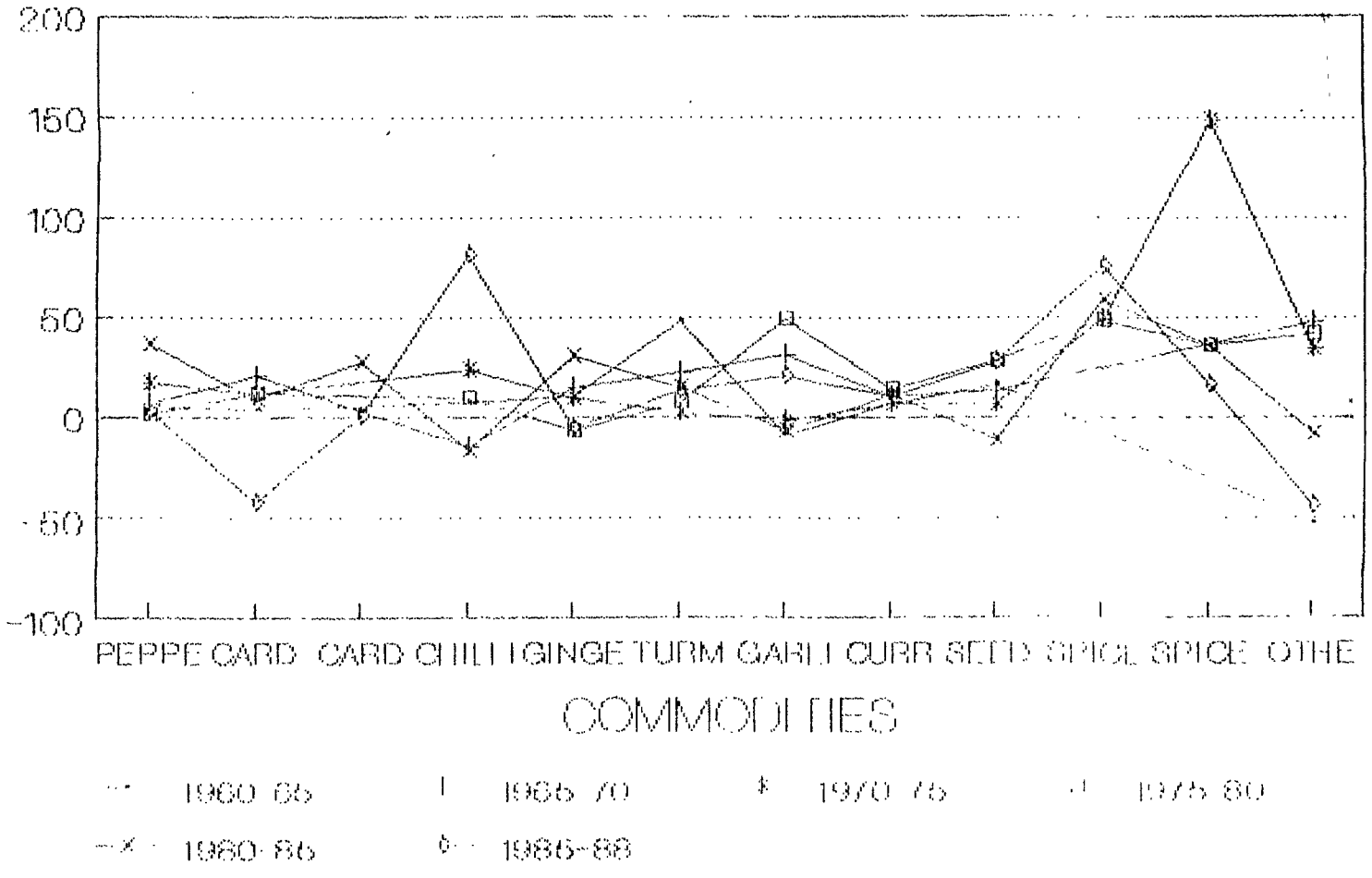
Trends In Annual Average Compound Growth Rates In Composition of Exports of Spices (Value) From India During 1960-65 to 1985-88

Commodities	1960-65	1965-70	1970-75	1975-80	1980-85	1985-88	1960-88
Pepper	5.5	6.6	17.3	1.7	36.2	2.9	11.7
Cardamom (Small)	3.6	20.6	11.6	12.2	9.2	-42.3	3.7
Cardamom (Large)	-	-	-	-	27.8	0.9	-
Chillies	7.2	-15.2	23.9	9.5	-16.6	81.4	7.0
Ginger	10.2	14.9	9.5	-6.7	30.7	-5.2	8.7
Turmeric	47.6	22.1	2.0	7.4	14.9	13.2	15.6
Garlic	-8.9	31.4	-1.7	49.0	-6.3	20.9	12.0
Curry Powder	6.6	10.2	6.7	14.2	11.0	10.6	9.4
Seed Spices	16.2	13.7	6.8	28.0	-11.4	27.7	11.6
Spice Oils	-	-	49.4	48.4	59.0	76.0	-
Spice Oleoresins	-	-	148.3	35.8	35.6	16.2	-
Other spices	-53.1	47.7	34.5	42.0	-8.3	-44.0	5.9
Total	7.0	11.0	13.4	10.0	19.3	0.03	10.7

Source: Computed and Compiled from table -7

CHART - 5

ANNUAL AVERAGE COMPOUND GROWTH RATE IN COMPOSITION OF EXPORTS OF SPICES FROM INDIA DURING 1960-65 TO 1985-88



Between 1970 and 1975 spice-oleoresins have recorded higher compound growth rate as compared to spice-oils, chillies, pepper, cardamom (small), ginger, seed spices, curry powder and turmeric. The annual average compound growth rate was negative in case of garlic. During the periods 1975-80 pepper has shown lowest positive growth rate. Whereas garlic witnessed much higher compound growth rate as compared to the rate recorded by spice-oils, spice-oleoresins, seed spices, curry powder, cardamom (small), chillies and turmeric. Ginger registered negative annual average compound growth rate during the same period.

In the year 1980-85 the annual average compound growth rate was highest in case of spice-oils followed by pepper, spice oleoresins, ginger, cardamom(large), turmeric, curry powder and cardamom (small). While chillies, seed spices and curry powder witnessed negative compound growth rates during the same period. Between 1985 and 1988 pepper registered lowest positive compound growth rate after cardamom(large). Chillies recorded highest compound growth rate followed by spices oils, seed spices, garlic, spice oleoresins, turmeric and curry powder, while cardamom(small) and ginger registered negative annual average compound growth rates(Chart-5).So far as the annual average compound growth rates of these spices between 1960 and 1988 are concerned, they were highest in

case of turmeric followed by garlic, pepper, seed spices, curry powder, ginger, chillies and cardamom (small).

It is clear from the table 8 that fluctuations in annual average compound growth rate have been a regular feature in all the spices which have been selected for comparative study during 1960-61 to 1988-89. However, it is important to point out here that spices like turmeric, curry powder and pepper have witnessed a positive compound growth rate during the entire period of study. Cardamom (small) and seed spices are the other spices which recorded positive compound growth rates except during 1985-88 and 1980-85 respectively. The compound growth rate was very much significant in case of spice-oils and oleoresins. While chillies, ginger and garlic witnessed most fluctuating compound growth rate as compared to other spices. Table 9 shows the trends in exports of spices, production of spices and percentage share of export to production of spices during 1960-61 to 1988-89.

It is seen from the table 9 that the total production of spices has registered an overall increase of nearly 3 times. Similarly, total export of spices went up by more than 2 times during the same period. It means that the rate of increase in total production of spices is higher than the rate of increase in total exports of spices. This has been mainly because of higher domestic consumption. As a result, the share of export

Trends In Share of Export to Total Production of Spices During 1960-61 to 1988-89

Q = ('000 tonnes)

Year	Production*	Export	% share of Export to Production
1960-61	461.0	45.7	9.9
1965-66	541.0	62.5	11.6
1970-71	730.1	47.9	6.6
1975-76	737.3	62.0	8.4
1980-81	843.4	92.5	11.0
1981-82	844.1	68.4	8.1
1982-83	841.6	75.1	8.9
1983-84	931.9	85.8	9.2
1984-85	1026.5	89.2	8.7
1985.86	1202.6	74.5	6.2
1986-87	1230.2	82.8	6.7
1987-88	1084.0	70.3	6.5
1988-89	1154.5	94.4	8.2
% Increase/ decrease over 1960-61	150.4	106.6	-1.7

*It is the sum of only black pepper, cardamom, chillies, ginger and turmeric

Source: Production; Directorate of Economics & Statistics, New Delhi.

Export; Spices Board, Cochin

Table - 10

Trends In Annual Average Compound Growth Rates In Total Spices Export and Total Production of Spices During 1960-65 to 1985-88

Year	Production Annual Average Compound Growth Rates	Export Annual Average Compound Growth Rates
1960-65	3.3	6.5
1965-70	6.2	-5.2
1970-75	0.2	5.3
1975-80	2.7	8.3
1980-85	7.4	-4.2
1985-88	-2.0	8.2
1960-88	3.3	2.6

Source: Computed and Compiled from Table -9

in total production went down from 9.9 percent in 1960-61 to 8.2 percent in 1988-89, indicating a fall of 1.7 percent.

Trends In Annual Average Compound Growth Rates:

If we look at table 10, it emerges that during 1960-65 the annual average compound growth rate was higher in case of exports of spices as compared to the growth rate in production of spices. However, during 1965-70 the production of spices recorded positive compound growth rate, whereas the exports of spices witnessed negative annual average compound growth rate. During 1970-75 the compound growth rate in production of spices was lesser as compared to exports of spices. Between 1975 and 1980 also the same trend was seen. But during the periods 1980-85 production of spices recorded fairly high annual average compound growth rate, while exports of spices showed negative compound growth rate. However, during the period 1985-88 the trend became reverse and as a result the production of spices registered negative growth rate, while exports of spices achieved fairly high compound growth rate. On the whole, the growth rates of production and exports of spices showed erratic trends.

Demand Pattern of Spices In Overseas Markets:

In a study conducted by International Trade Centre, it is revealed that North America and Western Europe are the

most important regions in terms of import demand for spices. The Eastern European countries are significant outlets for Indian pepper. These countries import pimento from Jamaica. Latin American countries are significant importers of cinnamon and cassia, while countries in the Middle East and Saudi Arabia are major markets for green cardamom, accounting for over 80 percent of the total world consumption of this spice. Since 1976 the European Economic Community (EEC) (excluding Ireland and Greece) have imported larger quantities of spices than the United States although the later is the world's largest individual market. In 1985 EEC imports amounted to 122000 tonnes valued at US $ 238 million. The other European countries such as Austria, Finland, Norway, Swedan, Switzerland and Yogoslavia together imported almost 20,000 tonnes of spices valued at US $ 45 million in 1985. The second largest individual market for spices is West Germany accounting for one-third of the total imports of spices of West Europe. UK and France are the other markets of importance. Swedan and Finland are other major importers of cardamom after the Middle East.[1]

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1. Status Paper on Spices (1988), op. cit., P.4

Table - 12

Trends In Country-wise Export of Pepper From India During 1960-61 to 1988-89

Q = (M. Tonnes)

Country	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89*	1960-61**
U.S.S.R.	4918	8020	4110	10240	16011	8256	9468	17570	12539	155.0
	(28.6)	(30.5)	(22.9)	(42.3)	(63.2)	(22.0)	(25.7)	(44.4)	(32.0)	
U.S.A.	3735	5780	4310	3756	1460	14039	15091	7228	4777	27.9
	(21.7)	(22.0)	(24.0)	(15.5)	(5.8)	(37.4)	(40.9)	(18.3)	(12.2)	
Yogoslavia	671	1180	1506	421	919	934	883	1917	1803	168.7
	(3.9)	(4.5)	(8.4)	(1.7)	(3.6)	(2.5)	(2.4)	(4.8)	(4.6)	
Saudi Arabia	315	15	16	434	329	438	727	1456	1289	309.2
	(1.8)	(Neg)	(Neg)	(1.8)	(1.3)	(1.2)	(2.0)	(3.7)	(3.3)	
F.R.G.	163	65	191	28	368	1548	831	1750	1468	800.6
	(0.9)	(Neg)	(1.1)	(Neg)	(1.5)	(4.1)	(2.3)	(4.4)	(3.7)	
Italy	1549	2122	754	1284	1064	1153	2220	1018	1771	14.3
	(9.0)	(8.1)	(4.2)	(5.3)	(4.2)	(3.0)	(6.0)	(2.6)	(4.5)	
G.D.R.	348	480	914	520	552	1349	343	1095	1514	335.0
	(2.0)	(1.8)	(5.0)	(2.1)	(2.2)	(3.6)	(0.9)	(2.8)	(3.9)	
Czechoslo-	965	1050	933	888	718	826	866	405	10 77	12.0
vakia	(5.6)	(4.0)	(5.2)	(3.7)	(2.8)	(2.2)	(2.3)	(1.0)	(2.7)	
France	154	10	9	72	71	881	612	1789	1487	865.6
	(0.9)	(Neg)	(Neg)	(0.3)	(0.3)	(2.3)	(1.7)	(4.5)	(3.8)	
Polland	295	840	1131	1617	401	1300	410	655	370	25.4
	(1.7)	(3.2)	(6.3)	(6.7)	(1.6)	(3.5)	(1.1)	(1.7)	(0.9)	
Canada	547	1230	909	1254	1013	937	672	804	1047	91.4
	(3.2)	(4.7)	(5.0)	(5.2)	(4.0)	(2.5)	(1.8)	(2.0)	(2.7)	
Japan	N.A.	2	13	48	189	373	520	428	600	-
		(Neg)	(Neg)	(0.2)	(0.7)	(1.0)	(0.1)	(1.0)	(1.5)	
Egypt	497	N.A.	N.A.	N.A.	414	940	170	314	891	80.4
	(2.9)				(1.6)	(2.5)	(0.5)	(0.8)	(2.3)	
Singapore	353	N.A.	3	278	3	1383	753	396	205	-41.9
	(2.0)		(Neg)	(1.1)	(Neg)	(3.7)	(2.0)	(1.0)	(0.5)	
U.K.	72	20	27	189	37	441	363	254	638	786.1
	(0.4)	(Neg)	(Neg)	(0.8)	(0.1)	(1.2)	(1.0)	(0.6)	(1.6)	
Spain	43	160	19	28	39	232	297	134	335	679.0
	(0.3)	(0.6)	(Neg)	(0.1)	(0.2)	(0.6)	(0.8)	(0.3)	(0.9)	
Morocco	66	90	N.A.	N.A.	50	282	295	122	234	254.5
	(0.4)	(0.3)			(0.2)	(0.8)	(0.8)	(0.3)	(0.6)	
U.A.E.	N.A.	920	250	310	26	230	341	443	847	-
		(3.5)	(1.4)	(1.3)	(0.1)	(0.6)	(0.9)	(1.1)	(2.2)	
Otners	2512	4321	2875	2859	1673	1978	1997	1805	6256	149.0
	(14.6)	(16.4)	(16.0)	(11.8)	(6.6)	(5.3)	(5.4)	(4.6)	(16.0)	
Total	17200	26305	17970	24226	25337	37520	36859	39583	39168	127.7

*Provisional figures, Figures in brackets are percentages
**Percentage Increase/decrease over 1960-61

N.A. = Not Available
Neg.: Negligible
Source: Up to 1980-81 Monthly Statistics of the Foreign Trade of India (Various Issues) Published by D.G.C.I.& S Calcutta
1985-1986 to 1988-89- Daily list of Exports from Customs, Spices Board, Cochin.

From the table 12 it has brought out that exports to Japan, France, F.R.G., U.K. and Spain have done well as the exports to these countries have shown much better growth as compared to any other country which are under study.

On examination of direction of pepper exports it is also seen that the share of U.S.S.R., Yogoslavia, Saudi Arabia, F.R.G., G.D.R., France, Egypt, U.K., Morocco and Japan has increased during the period under review. While the share of U.S.A., Italy, Czechoslovakia, Polland, Singapore and U.A.E. has declined over the period under reference. It means that India's overall export performance has not been satisfactory and other major exporting countries have been capturing India's traditional markets. Therefore, there is an urgent need to recapture the lost share by regular supply at competitive prices to the countries whose shares have been shrinking in India's total export of pepper.

Trends In Annual Average Compound Growth Rates:

Table 13 shows the trends in annual average compound growth rates in country-wise export of pepper from India during 1960-61 and 1988-89.

From the table 13 it emerges that exports of pepper to Japan, France, F.R.G., U.K. and Spain recorded much better

Table - 13

Trends In Annual Average Compound Growth Rates in Country-wise Exports of Pepper From India During 1960-65 to 1985-88

Country	1960-65	1965-70	1970-75	1975-80	1980-85	1985-88	1960-88
U.S.S.R.	10.3	-12.5	20.0	9.4	-12.4	14.9	3.4
U.S.A.	9.1	-5.7	-2.7	-17.2	57.3	-30.2	0.9
Yogoslavia	12.0	5.0	-22.5	16.9	0.3	24.5	3.6
Saudi Arabia	-45.6	0.9	94.2	-5.4	5.9	43.3	5.2
F.R.G.	-16.7	24.1	-31.9	67.4	33.3	-1.8	8.2
Italy	6.5	-18.7	11.2	-3.7	1.6	15.4	0.5
G.D.R.	6.6	13.7	-10.7	1.2	19.6	3.9	5.4
Czechoslovakia	1.7	-2.3	-0.9	-4.2	2.9	9.2	0.4
France	-42.1	-2.0	51.7	-0.3	65.5	19.0	8.4
Polland	23.3	6.1	7.4	-24.3	26.5	-34.2	0.8
Canada	17.6	-5.9	6.6	-4.2	-1.5	-3.8	2.3
Japan	-	45.4	30.0	31.5	14.6	17.2	-
Egypt	-	-	-	-	17.8	-1.8	2.1
Singapore	-	-	147.4	-59.6	241.0	-47.0	-1.9
U.K.	-22.5	5.9	47.9	-28.0	64.5	13.1	8.1
Spain	29.9	-34.7	8.0	6.9	42.9	13.0	7.6
Morocco	6.5	-	-	-	41.4	-6.0	4.6
U.A.E.	-	-22.9	4.4	-39.3	55.1	54.4	-
Others	11.5	-7.8	-0.1	-10.2	3.4	46.8	3.3
Total	8.9	-7.3	6.2	0.9	8.2	1.4	3.0

Source: Compiled and Computed from Table - 12

annual average compound growth rates as compared to the rate registered in exports of pepper to other countries between 1 and 1988. Saudi Arabia, G.D.R., Morocco, Yogoslavia and U.S.S.R. are other countries which have also witnessed significant compound growth rates during the same period. It is remarkable to note that during 1980-85 exports of pepper to all the countries registered positive growth rates except U.S.S.R. and Canada which recorded negative growth rates. It is also pertinent to see here that out of 18 countries selected for comparative study, Japan was the only country to which exports of pepper witnessed positive annual average compound growth rates during the entire period of study. It means the exports of pepper to other countries have been erratic and the fluctuations have become a regular feature so far as the annual average compound growth rates are concerned.

Conclusion

From the foregoing analysis it is concluded that the overall export performance of Indian pepper has not been satisfactory as compared to other rival countries during the period 1960-61 to 1988-89. Accordingly, the rate of increase in India's pepper export has been low as compared to world, Indonesia and Brazil's export of pepper. The main competitor

of India in export of pepper are Indonesia, Malaysia and Brazil. Few years ago these countries were exporting more pepper than India. However, prevalance of drought conditions in Indonesia, Brazil and Malaysia alongwith widespread incidence of diseases and pests resulted in substantial loss of production in these countries (appendix II). As a result, there had been shortages of supply in global market which forced unprecendented rise in prices of pepper. India took advantage of the situation and thus exported increased quantity of pepper in the worldmarket. Despite this India has not been able to achieve its lost share which it had in 1960.

It is also concluded that the share of pepper in total spices export earnings has increased considerably over the years under review. Similarly, the relative share of export to total production of pepper has also increased significantly during the same period. Direction of pepper exports of India has witnessed a considerable shift during the period under reference. During 1960-61, U.S.S.R., U.S.A., Italy and Czechoslovakia were the main importing countries accounting for about 65.0 percent of the total India's export of pepper, while during 1988-89 their shares stood at only

51.4 percent. Another major diversification which has come to the light has been that during 1960-61 Saudi Arabia, F.R.G., France, Japan, U.K. and Spain together accounted for 4.3 percent of the total export of pepper from India, whereas during 1988-89 these countries imported nearly 15.0 percent of the total India's pepper exports. It all shows that India has been losing its major traditional markets (viz., U.S.A., Italy and Czechoslovakia).

Chapter - VI

EXPORT PERFORMANCE OF CARDAMOM

Chapter -VI

EXPORT PERFORMANCE OF CARDAMOM

Cardamom, known as the 'Queen of Spices', is one of the most important and unique plantation crops of India. It has been occupying a place of eminence right from the days of the earliest trade contracts which India had with the different countries of the world. As spices have figured in the export trade of India, cardamom stands second in terms of foreign exchange earnings among major spices exported from India. However, in recent years its share in total export earnings from spices has been dwindling and as a result it has got third place after pepper and turmeric.

It is acknowledged that Indian cardamom is the proven choice of the consumers due to its fine aroma and flavour. It is used as a flavouring agent for various drinks and also to prepare sweets. It is also used for chewing with bessle leaves called 'Pamboola' and some people chew it after food as a digestive material producing a fragrant smell. In foreign countries it is used in different purposes. In Gulf and West Asia countries it is traditional to spice coffee with cardamom. While in West European countries it is used in confectionery manufactures. Similarly, in the U.S.A. it is generally used in packed foods

and Danish Pastry, and in Japan it is mixed in curry powder and sausages etc.[1]

Indian cardamom is considered superior in quality in the trade circle of spices in the world. The demand for it has been on the increasing side in all the importing consuming countries. After meeting internal demands, significant quantities are exported. However, during 1988-89 India exported only 0.8 thousand ton of cardamom valued at Rs. 10.3 crores i.e. 3.6 percent of the total export earnings from different spices. With this background this chapter deals with the trends and pattern of world trade in cardamom since 1960. It further analyses the trends in export of cardamom from major producing/ exporting countries. It also examines the export performance Indian cardamom at length.

Trends In World Exports:

India, Guatemala, Sri Lanka and Tanzania are the major producers and exporters of cardamom in the world. Papua New Guinea, Costa Rica and El Salvador are also emerging as new producers and exporters of cardamom. Till the end of the 1970s India was the largest producer and exporter of cardamom in the world. It will not be improper to say that India had almost monopoly. The increasing consumption pattern and popularity of cardamom gave an impulse to the other nations to increase production and export and as a result Guatemala increased the produc-

1. Iqbal, A.B., "Indian Spices-Problems and Prospects", Faculty of Commerce, AMU, Aligarh, 1982, p.25

tion and export of cardamom considerably and became the largest producer and exporter of cardamom in the world pushing India to the second place. At present Guatemala accounts for 80 to 90 percent of the total world export, whereas India constitutes only 3 percent. The major importers of Indian cardamom are Saudi Arabia, Kuwait, Jordan, Qatar, U.A.E., U.S.A., U.S.S.R. and Western Europe. Other important importers include West Germany, Pakistan, U.K., Japan and Iraq. The higher consumption of cardamom has been in Saudi Arabia where cardamom is used in the preparation of the traditional drink called "gahwa".[1]

It is pertinent to note here that two countries i.e. India and Guatemala have been exporting 80 to 93 percent of the total global export since 1960. The major share was contributed by India during the decades of 1960s and 1970s. But now the situation has become reverse and consequently the major share comes from Guatemala. In 1987-88 the total world export of cardamom was 10.2 thousand tonnes. Out of which India exported only 0.3 thousand ton i.e. 2.9 percent of the total world export of cardamom. Whereas Guatemala accounted 9.4 thousand tonnes or 92.2 percent followed by Sri Lanka and Tanzania 0.1 thousand ton or 1.0 percent and 0.1 thousand ton or 1.0 percent of total world export of cardamom respectively.

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1. Spices Board, Cochin, Status Paper on Spices 1988, p-35

Table 1 shows the trends in world export of small cardamom (quantity) during 1960-61 to 1987-88.

If we have a look at table 1 it appears that the world export of cardamom (quantity) registered an overall increase of nearly 4 times during 1960-61 to 1987-88. Whereas total export of cardamom (quantity) from India recorded an overall decrease of less than one time during the same period. This has been mainly because of low production caused by extreme variations in climate conditions and tough competition from Guatemala as well as higner prices in domestic market. Total export of cardamom from Guatemala witnessed an overall rise of nearly 16 times between 1960-61 and 1987-88. The main contributory factor for sharp rise in export of cardamom from Guatemala has been considerable increase in total production (appendix III). So far as the quantity exported of cardamom from Sri Lanka and Tanzania are concerned, they registered an alarming decline of less than one time each between 1970-71 and 1987-88.

Table 2 shows the trends in export of cardamom from major exporting countries (value) during 1960 and 1987.

It is seen from the table 2 that total value of world export of cardamom recorded an overall increase of 2.3 times during 1960 to 1987. However, total value earned from cardamom

Table -1

Trends In World Exports of Small Cardamom (Only Leading Countries) During 1960-61 to 1987-88

('000 tonnes)

Year	World	India	Guatemala	Sri Lanka	Tanzania
1960-61	2.7*	2.0	0.6	N.A.	N.A.
1965-66	1.9	1.4	0.4	N.A.	N.A.
1970-71	3.1	1.7	1.0	0.2	0.2
1975-76	5.0	1.9	1.7	0.3	1.0
1980-81	6.4	2.3	3.4	0.2	0.5
1985-86	8.9	3.3	5.1	0.1	0.1
1986-87	9.8	1.5	7.9	0.1	0.1
1987-88	10.2	0.3	9.4	0.1	0.1
% Increase or decrease over 1960-61	277.8	-85.0	1466.7	-50.0	-50.0[a]

Note: N.A.: Not Available
*Incomplete figures
a = Indicates decrease over 1970-71

Source: Cardamom Board, Cochin, Tropical Development and Research Institute, London (U.K.)

Table -2

Trends In Export of Cardamom (Small) From Major Exporting Countries(Value) Between 1960 and 1987

V = (US $ Million)

Year	World+	India	Guatemala
1960	8.8	7.7	1.1
1965	8.9	8.9	N.A.
1970	59.3	14.9	4.7
1975	39.1	23.3	10.7
1980	110.9	45.4	62.7
1985	67.5	43.3	24.3
1986	33.7	14.6	19.1
1987	20.6	2.6	18.0
% Increase or decrease over 1960	134.0	-66.2	1545.5

Source: 1. Cardamom Board, Cochin
2. The Europa World Year Book (Various Issues)

+ Incomplete Figures, Data of 1988 are not available

exports from India witnessed an overall decrease of less than one time during the same period. While total value earned from Cardamom export from Guatemala registered an overall rise of 16.4 times during the period under study. It means that the rate of rise in value earned by Guatemala has been much higher as compared to the rate of increase in value of world export and India's export of cardamom.

Table 3 shows the trends in relative share of major exporting countries in world export of cardamom (quantity and value) fro. 1960 to 1987.

It is clearly visible from table 3 that the share of India, Sri Lanka and Tanzania in world export of cardamom (quantity) witnessed an overall decline of 71.1 percent, 4.2 percent and 5.5 percent respectively during the period under study. Whereas the share of Guatemala recorded an overall increase of 70.0 percent between 1960 and 1987 (Chart-1). The same trend has been witnessed in case of value earned also (Chart-2).

It has brought out from the table 1,2 and 3 that the world and Guatemala's export performance in regard to cardamom has been good. However, the trends in regard to export of cardamom from India, Sri Lanka and Tanzania have been falling drastically and as a result these countries have been losing their share in the world export of cardamom. It is, therefore, necessary for India, Sri Lanka and Tanzania to boost their

Table -3

Trends In Relative Share of India and Guatemala (Quantity & Value) In World Export of Cardamom Between 1960 and 1987

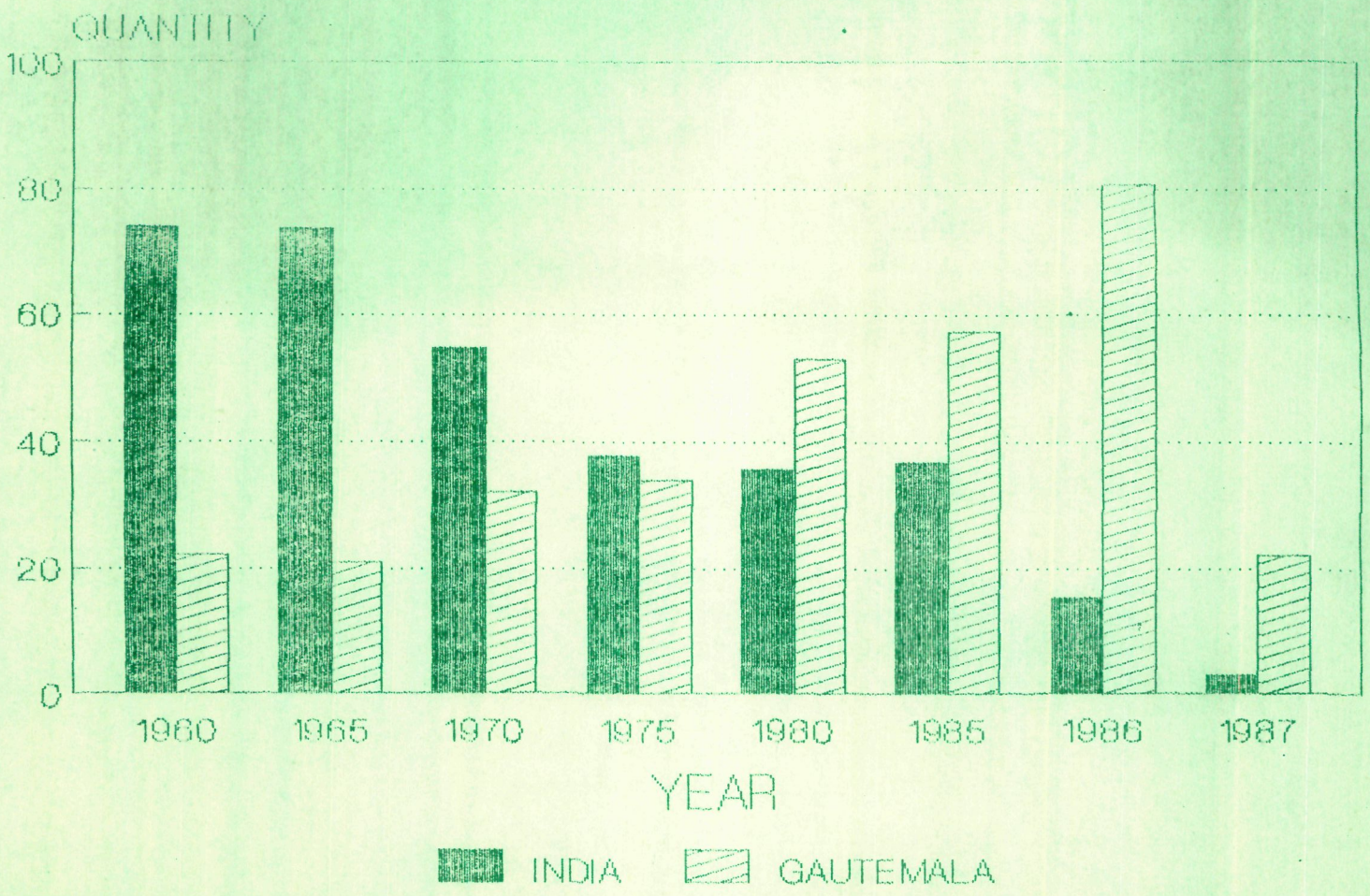
(in %)

Year	Quantity		Value	
	India	Guatemala	India	Guatemala
1960	74.0	22.2	87.5	12.5
1965	73.7	21.0	100.0	-
1970	54.8	32.3	25.1	7.9
1975	38.0	34.0	59.6	27.4
1980	35.9	53.1	40.9	56.5
1985	37.0	57.3	64.1	36.0
1986	15.3	80.6	43.3	56.7
1987	2.9	92.2	12.6	87.4

Source: Computed and Compiled From Table 1 & 2

CHART - 1

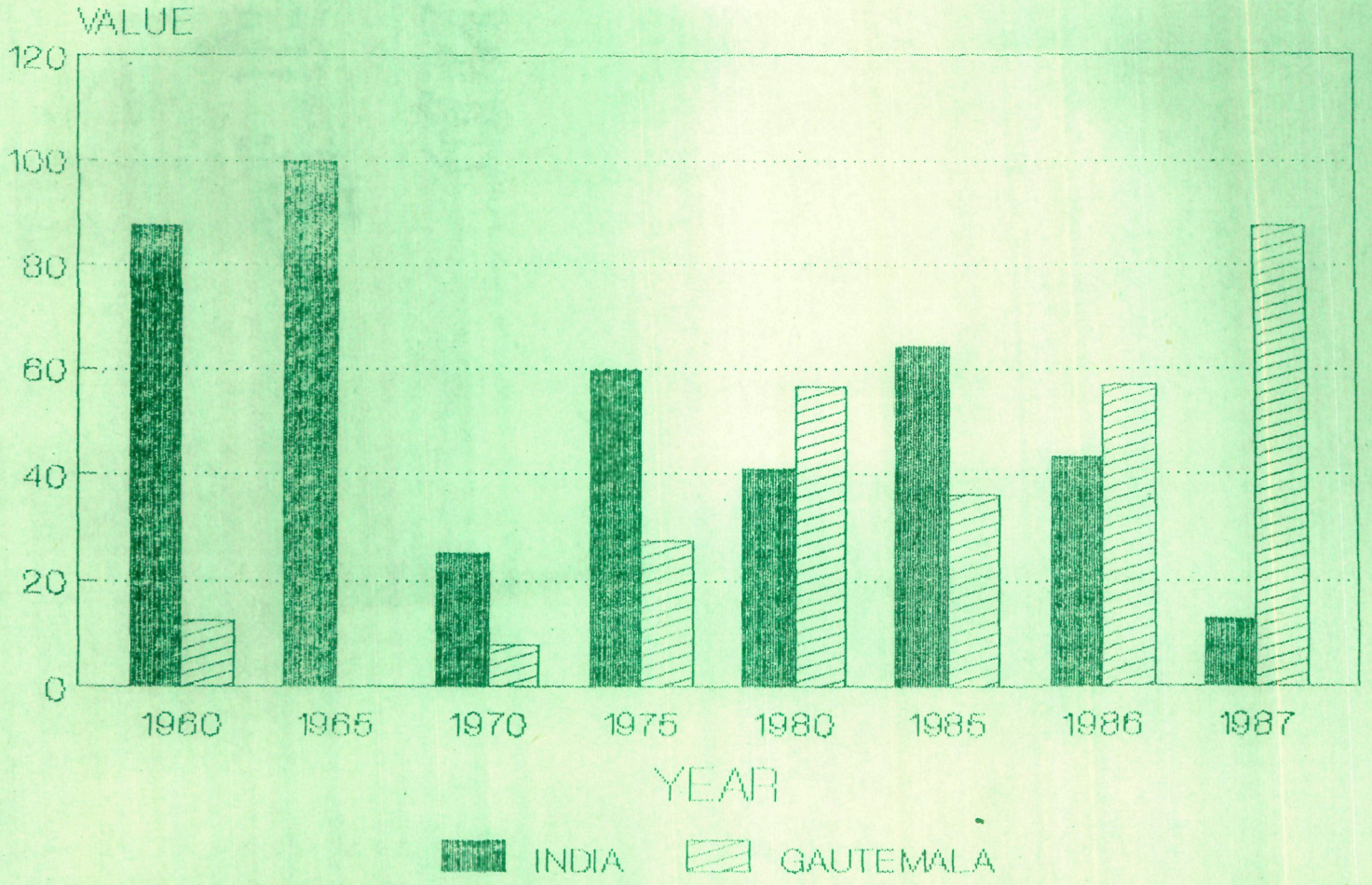
RELATIVE SHARE OF INDIA AND GAUTEMALA (QUANTITY) IN WORLD EXPORT OF CARDOMOM (SMALL)



(IN %)

CHART - 2

RELATIVE SHARE OF INDIA AND GAUTEMALA (VALUE) IN WORLD EXPORT OF CARDOMOM (SMALL)



(IN %)

export by raising the production and productivity of cardamom.

Trends In Annual Average Compound Growth Rates:

Table 4 shows the trends in annual average compound growth rates of world, India, Guatemala, Sri Lanka and Tanzania in regard to total volume of cardamom export during 1960-65 to 1985-87.

From table 4 it appears that the annual average compound growth rate of Guatemala has been all along conspicuous in regard to export of cardamom except between 1960 and 1965. The same trend has been witnessed by world also. However, the rate of growth in world exports of cardamom has been slow as compared to the rate of growth in exports of cardamom from Guatemala. The trends in annual average compound growth rate in export of cardamom from India has been highly erratic and fluctuating during the period under review. The annual average compound growth rate in respect of Sri Lanka and Tanzania has not been showing any tendency to rise after 1970-75. On the whole, Guatemala has done fairly well as compared to other major exporting countries as it has recorded much better annual average compound growth rate between 1960 and 1987.

Table 5 shows the trends in annual average compound growth rates of world, India and Guatemala in respect of total

Table -4

Trends in Annual Average Compound Growth rates of World, India, Guatemala, Sri Lanka and Tanzania's total volume of cardamom export During 1960-65 to 1985-87

Year	World Annual average Compound Growth Rates	India Annual Average Compound Growth Rates	Guatemala Annual Average Compound Growth Rates	Sri Lanka Annual Average Compound Growth Rates	Tanzania Annual Average Compound Growth Rates
1960-65	-6.8	-6.9	-7.8	-	-
1965-70	10.3	4.0	20.1	14.9	-
1970-75	10.0	2.2	11.2	8.4	38.0
1975-80	5.0	3.9	14.9	-7.8	-12.9
1980-85	6.8	7.5	8.4	-12.9	-27.5
1985-87	7.1	-69.8	35.8	Nil	Nil
1960-87	5.0	-6.8	10.7	-	-

Source: Computed and compiled from table -1

Table -5

Trends In Annual Average Compound Growth Rates of World, India and Guatemala's Total value of cardamom Export From 1960-65 to 1985-87

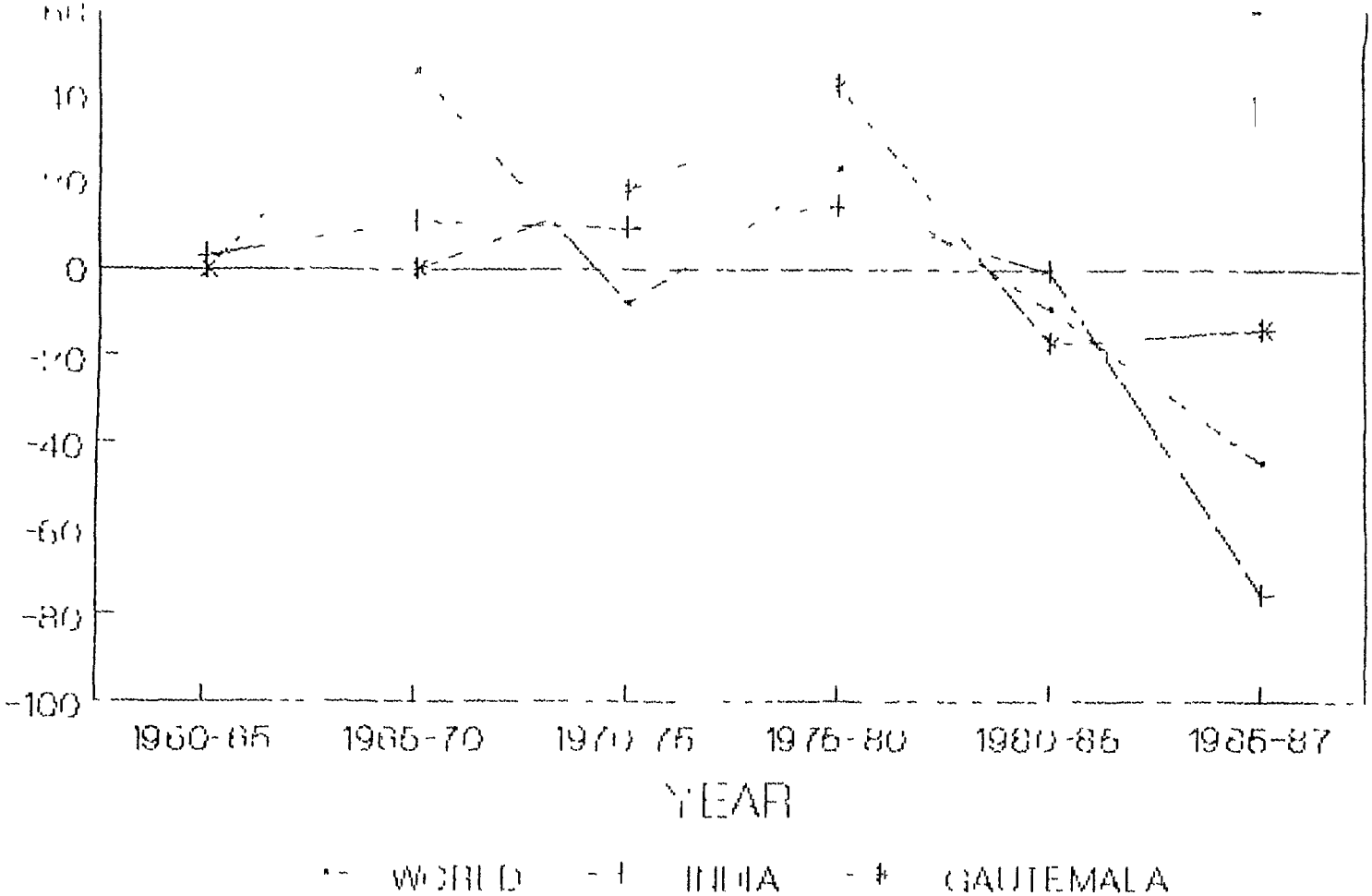
Year	World Annual Average Compound Growth Rates	India Annual Average Compound Growth Rates	Guatemala Annual Average Compound Growth Rates
1960-65	-0.2	2.9	-
1965-70	46.1	10.9	-
1970-75	-8.0	9.4	17.9
1975-80	23.2	14.3	42.4
1980-85	-9.5	-0.9	-17.3
1985-87	-44.8	-75.5	-13.9
1960-87	3.2	-3.9	10.9

Note: Annual Average Compound Growth Rate has not worked out in case of Sri Lanka & Tanzania because data of these countries were not available.

Source: Computed and Compiled From Table -2

CHART - 3

ANNUAL AVERAGE COMPOUND RROWTH RATES OF WORLD, INDIA & GAUTEMALA'S TOTAL VALUE OF CARDOMOM EXPORTS FROM 1960TO1987



value earned from cardamom export between 1960 and 1987.

It is perceptible from table 5 that during 1960-65 annual average compound growth rate was better in case of India's export of cardamom, while world export of cardamom witnessed negative compound growth rate. However, during 1965-70 world registered much better compound growth rate as compared to India. Between 1970 and 1980 Guatemala recorded better compound growth rates as compared to world and India. Between 1980 and 1987, world, India and Guatemala witnessed negative compound growth rates (Chart-3). However, on the whole Guatemala has done fairly well as it has registered much better compound growth rate as compared to world and India's export of cardamom between 1960 and 1987.

Trends In India's Exports:

Generally, India exports 2 to 3 thousand tonnes of cardamom. However, during the last three years (1986-87 to 1988-89) its performance has been dissatisfactory and highly erratic. In the early years of the 1980s the major portion of production was exported. But now the domestic consumption has increased and as a result the export of this valuable spice has been badly affected (table-10). In the decades Of the sixtees and seventees, the share of cardamom in India's total export earnings from spices constituted 20 to 25 percent.

However, during 1988-89 its share stood at only 3.6 percent. This has been mainly because of lesser export.

Table 6 shows the trends in export of small cardamom (quantity, value and unit value) from 1960-61 to 1988-89.

It is evident from the table 6 that the total volume of cardamom exported went down by less than one time in 1988-89 over 1960-61 after reaching a peak level of 3.2 thousand tonnes in 1985-86. Whereas the total value earned from the export of cardamom increased by nearly 3 times during the same period. But inspite of decrease in total quantity exported, total value of cardamom export has gone up. This has been mainly due to unprecedented rise in unit value of cardamom in international market which has recorded an increase of more than 7 times during the period under review.

Table 7 shows the trends in annual average compound growth rate in exports of small cardamom (quantity, value and Unit value) during 1960-65 to 1985-88.

It is evident from the table 7 that during 1960-65 unit value of cardamom export has done fairly well as compared to the total value of cardamom export so far as annual average compound growth rates are concerned. Whereas total volume of

Table -6

Trends In Exports of Small Cardamom (Quantity & Value) From India During 1960-61 to 1988-89

Q = ('000 tonnes)
V = (Rs. crores)

Year	Quantity Exported	Value Earned	Unit Value (Rs. per kg.)
1960-61	2.0	3.7	18.5
1965-66	1.4	4.4	31.4
1970-71	1.7	11.2	65.9
1975-76	1.9	19.4	102.1
1980-81	2.3	34.5	150.0
1981-82	2.4	31.1	129.6
1982-83	1.0	16.4	164.0
1983-84	0.3	5.4	180.0
1984-85	2.5	64.8	270.0
1985-86	3.2	53.4	166.9
1986-87	1.4	18.5	132.1
1987-88	0.3	3.4	113.3
1988-89*	0.8	10.3	128.8
% Increase/ decrease over 1960-61	-60.0	178.3	596.2

*Provisional Figures

Source: Directory of Exporters of Spices (1985)
Customs Lists-Spices Board, Cochin

Table -7

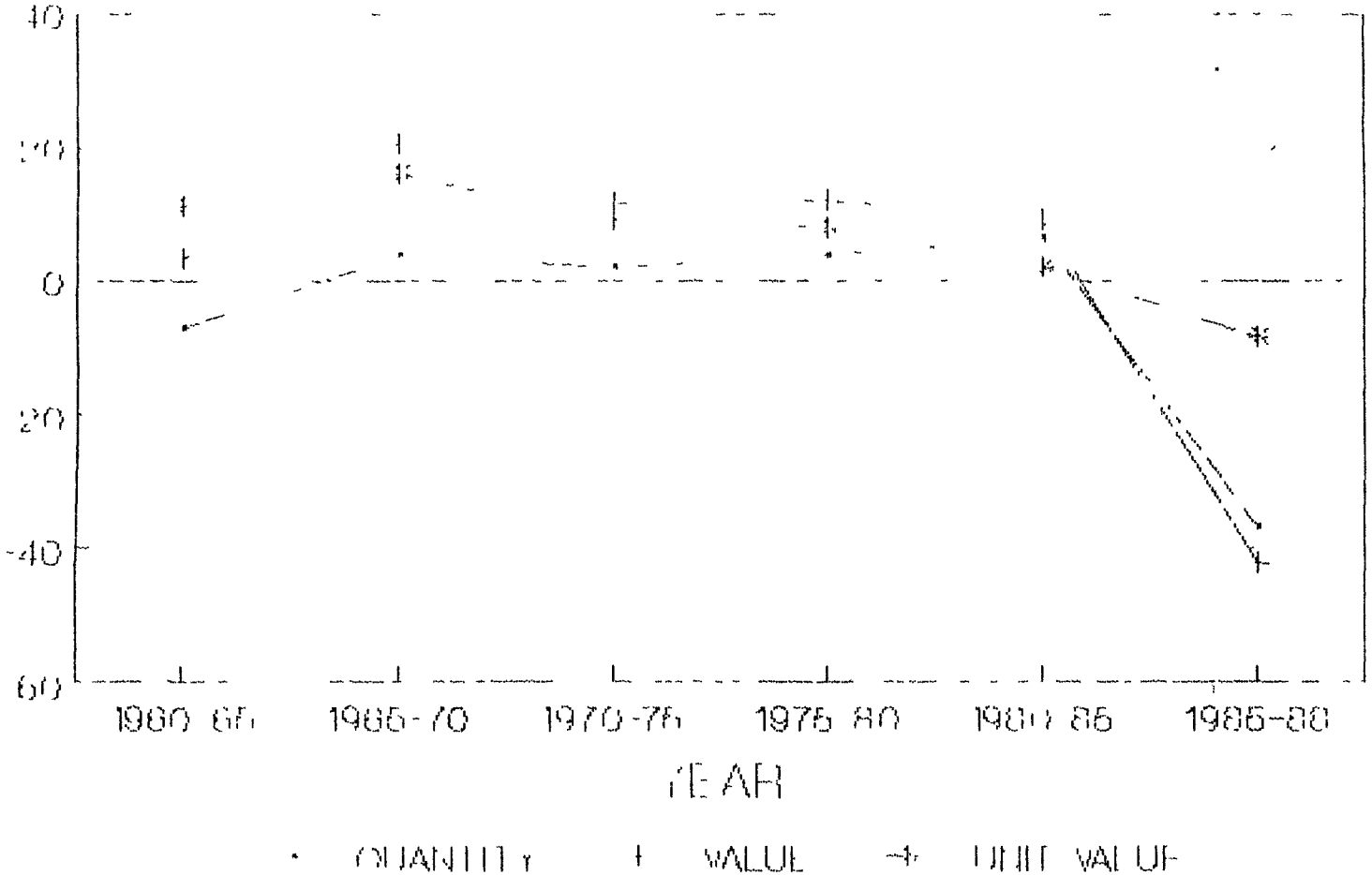
Trends In Annual Average Compound Growth Rates In Exports of Small Cardamom (Quantity, Value and Unit Value) During 1960-65 to 1985-88

Year	Quantity Exported	Value Earned	Unit Value
	Annual Average Compound Growth Rates	Annual Average Compound Growth Rates	Annual Average Compound Growth Rates
1960-65	-6.9	3.5	11.2
1965-70	4.0	20.5	16.0
1970-75	2.2	11.6	9.2
1975-80	3.9	12.2	8.0
1980-85	6.8	9.1	2.1
1985-88	-37.0	-42.2	-8.3
1960-88	-3.2	3.7	7.2

Source: Computed and Compiled From Table -6

CHART - 4

ANUAL AVERAGE COMPOUND GROWTH RATE IN EXPORTS OF SMALL CARDOMOM FROM INDIA DURING 1960-65 TO 1985-88



(QUANTITY), VALUE, UNIT VALUE)

cardamom export witnessed negative compound growth rate. Between 1965 and 1985 total value of cardamom export registered much higher annual average compound growth rates as compared to unit value of cardamom export and total volume of cardamom export. But the period 1985-88 was the worst period for total volume, total value and unit value of cardamom export because all three facets recorded negative growth rates (Chart-4). On the whole, (between 1960 and 1988) unit value of cardamom export witnessed much better annual average compound growth rate than total value and total volume of cardamom export.

Table 8 shows the trends in percentage share of small cardamom in total earnings from exports of spices between 1960-61 and 1988-89.

It is seen from the table 8 that the total export earnings from all spices has gone up by more than 17 times during 1960-61 to 1988-89. But the export earnings from cardamom has risen only by nearly 3 times during the same period. It means that the rate of increase in export earnings from all spices has been much higher than the rate of increase in export earnings from cardamom. This has been mainly due to a higher rate of increase in export earnings in case of other spices such as pepper and turmeric as compared to the rise in export

Table -8

Trends In Relative Share of Small Cardamom In Total Earnings from Exports of Spices During 1960-61 To 1988-89

(Rs. Crores)

Year	Earnings From Exports of spices	Earnings From Exports of Small Cardamom	% Share of Cardamom in Total Earnings
1960-61	16.4	3.7	22.6
1965-66	23.0	4.4	19.1
1970-71	38.8	11.2	28.9
1975-76	72.7	19.4	26.7
1980-81	117.0	34.5	29.5
1981-82	92.3	31.1	33.7
1982-83	92.4	16.4	17.7
1983-84	111.7	5.4	4.8
1984-85	209.0	64.8	31.0
1985-86	282.5	53.4	18.9
1986-87	281.9	18.5	6.6
1987-88	298.0	3.4	1.1
1988-89*	282.7	10.3	3.6
% Increase/ decrease over 1960-61	1623.8	178.4	-19.0

*Provisional Figures

Source: Spices News Letter, Nov., 1985, P-15
Custom Lists- Spices Board, Cochin.

earnings from cardamom. As a result, the share of cardamom in total export earnings from spices went down (i.e. from 22.6 percent to 3.6 percent) by 19 percent during the period under reference.

Table 9 shows the trends in annual average compound growth rates in total value of spices export and total value of cardamom (small) export between 1960-65 and 1985-88

From the table 9 it emerges that during 1960-65 annual average compound growth rate was much better in case of value of total spices export as compared to the value of cardamom export. However, during 1965-70 value of cardamom export recorded much higher compound growth rate as compared to value of total spices export. Between 1970 and 1975 value of total spices export again registered higher annual average growth rate as compared to value of cardamom export. During the period 1975-80 the compound growth rate was better in case of value of cardamom export than the value of total spices export. Between 1980 and 1985 value of total spices export witnessed much higher compound growth rate as compared to value of cardamom export. During 1985-88 value of total spices export recorded negligible growth rate, while value of cardamom export showed negative compound growth rate. On the whole (between 1960 and 1988) value of total spices export has done fairly well as its

Countries in the Middle East and North Africa are also important markets accounted for a substantial share of the spice in terms of value mainly due to considerable imports of high value cardamom and pepper. In the Asia and Pacific region the major consumer of spices is Japan which is the third largest individual market for spices in the world. Japan's import of spices in 1984 was 24000 tonnes valued at US $ 44 million. For entrepot trade in spices, Singapore and Hong Kong are very significant, especially pepper from Sarawak.[1]

Direction Of Exports:

India has been exporting spices to more than 70 countries of the world. The major importers of Indian spices are U.S.S.R., U.S.A., Yogoslavia, Saudi Arabia, Italy, Czechoslovakia, Sri Lanka, Japan, Canada, Iran, Aden, Kuwait and Singapore. Table 11 shows the trends in direction of exports of spices (quantity) from India between 1960-61 and 1988-89.

It is evident from the table 11 that total exports of spices to U.S.S.R. went up by nearly 3 times during 1960-61 to 1988-89. Total exports of spices to U.S.A. rose by more than 2 times during the same period. Total exports of spices to Yogoslavia, Saudi Arabia, Italy and Czechoslovakia also increased by 2.7 times, 3.3 times, 1.1 times and 1.7 times respectively. However, total exports of spices to Sri Lanka went down by less than 1.0 time during the periods 1960-61 and 1988-89.

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1. Status Paper on Spice (1988), op. cit.,p. 5

Table - 11

Trends In Direction of Exports of Spices From India During 1960-61 to 1988-89

Q = (M. Ton)

Country	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89*	1960-61**
U.S.S.R.	4992 (14.0)	8054 (15.6)	4409 (12.2)	10781 (23.3)	16555 (31.6)	8898 (15.5)	9578 (14.3)	17670 (30.1)	13092 (19.0)	162.3
U.S.A.	3735 (10.5)	7131 (1.8)	5241 (14.6)	6754 (14.6)	4750 (9.0)	16993 (29.6)	19006 (28.3)	10322 (17.6)	8979 (13.0)	140.4
Yogoslavia	671 (1.9)	1180 (2.3)	1506 (4.2)	421 (0.9)	919 (1.8)	934 (1.6)	883 (1.3)	1917 (3.3)	1803 (2.6)	168.7
Saudi Arabia	1181 (3.3)	539 (1.0)	2170 (6.0)	3515 (7.6)	2786 (5.3)	5317 (9.3)	3315 (4.9)	3436 (5.9)	3874 (5.6)	228.0
Italy	1549 (4.4)	2122 (4.1)	754 (2.1)	1284 (2.8)	1064 (2.0)	1153 (2.0)	2220 (3.3)	1018 (1.7)	1771 (2.6)	14.3
Czechoslovakia	665 (1.9)	1050 (2.0)	974 (2.7)	917 (2.0)	747 (1.4)	846 (1.5)	877 (1.3)	415 (0.7)	1112 (1.6)	67.2
Sri Lanka	6229 (17.6)	10568 (20.0)	2236 (6.2)	11 (0.02)	1775 (3.4)	743 (1.3)	1951 (2.9)	2587 (4.4)	2192 (3.2)	- 6.8
Japan	29 (0.08)	1089 (2.1)	761 (2.1)	958 (2.0)	1221 (2.3)	1327 (2.3)	2503 (3.7)	2041 (3.5)	2390 (3.5)	8141.4
Canada	547 (1.5)	1392 (2.7)	1061 (3.0)	1488 (3.2)	1417 (2.7)	1288 (2.2)	1234 (1.8)	1116 (1.9)	1306 (1.9)	138.8
Iran	62 (0.2)	764 (1.5)	2389 (6.6)	2128 (4.6)	2021 (3.9)	456 (0.8)	1886 (2.8)	263 (0.5)	1045 (1.5)	1585.5
Aden	2247 (6.3)	1891 (3.7)	737 (2.0)	588 (1.3)	236 (0.5)	289 (0.5)	453 (0.7)	-	-	-
Kuwait	195 (0.6)	605 (1.2)	999 (2.8)	851 (1.8)	796 (1.5)	1295 (2.3)	554 (0.8)	259 (0.4)	244 (0.4)	25.1
Singapore	374 (1.0)	-	449 (1.3)	2385 (5.2)	1566 (3.0)	1994 (3.5)	1981 (3.0)	882 (1.5)	750 (1.1)	100.5
Others	13011	15233	12327	14159	16472	16028	20788	16852	30434	133.9
Total	35487	51618	36013	46240	52325	57511	67229	58778	68992	94.4

*Provisional Figures
Figures in bracket are the percentages
**Percent Increase orDecrease over 1960-61.
Note: It is extracted from country-wise Export of Pepper, Cardamom, chillies, Ginger & Turmeric
Source: D.G.C.I.&S, Calcutta (Various Issues)

Total exports of spices from India to Japan witnessed an overall increase of more than 82 times between 1960-61 and 1988-89. Similarly, total exports of spices to Canada, Iran, Kuwait and Singapore recorded an overall increase of 2.4 times, 17.0 times, 1.3 times and 2.0 times respectively during the same period. While total exports of spices to Aden registered an overall decrease of less than 1.0 time between 1960-61 and 1986-87.

It is concluded from the above analysis that the exports of spices (quantity) to all the selected individual markets have increased except Aden and Sri Lanka during 1980-81 to 1988-89. However, the overall increase in quantum of exports to Japan was highest (82 times) followed by Iran (17 times), Saudi Arabia (3 times), Yogoslavia (3 times), USSR (3 times), USA (2 times), Canada (2 times), Singapore (2 times), Czechoslovakia (1.7 times), Kuwait (1.3 times) and Italy (1.1 times). Similarly, when we see the relative shares of these individual markets in total India's exports of spices, it is found that USSR has increased its share by 5 percent followed by Japan 3.4 percent, USA 2.5 percent, Saudi Arabia 2.3 percent, Iran 1.3 percent, Yogoslavia 0.7 percent, Canada 0.4 percent and Singapore 0.1 percent during the period 1960-61 to 1988-89. whereas Sri Lanka, Aden, Italy, Czechoslovakia and Kuwait have lost their shares in total India's exports of spices by 14.4 percent, 5.6 percent, 1.8 percent, 0.3 percent and 0.2 percent respectively during the same period.

On critical assessment of the growth in exports of spices to these countries and their shares in total India's spices exports, it is felt that exports to Sri Lanka, Aden, Italy, Czechoslovakia and Kuwait have been badly affected. The share of Iran, Yogoslavia, Canada and Singapore in total spices exports from India have also not shown any significant growth during the period under review. India is, thus, losing its traditional markets.

Trends In Annual Average Compound Growth Rates:

Table 12 is an indicative of the annual average compound growth rate in country-wise exports of spices during 1960-65 and 1985-88.

Table 12 reveals that during 1960-65 the annual average compound growth rate was highest in case of Japan followed by Iran, Kuwait, Canada, USA, Yogoslavia, Sri Lanka, USSR, Czechoslovakia and Italy. Whereas Saudi Arabia and Aden witnessed negative annual average compound growth rate during the same period. Between 1965 and 1970 Saudi Arabia, Iran, Kuwait and Yogoslavia were the only countries to which exports of spices showed positive compound growth rates. The compound growth rates were negative in rest of the countries such as Sri Lanka, Italy, Aden, USSR, Japan, USA, Czechoslovakia and Canada during the same period.

Table - 12

Trends In Annual Average Compound Growth Rates In Country-wise Exports of Spices from India During 1960-65 to 1985-88

Country	1960-65	1965-70	1970-75	1975-80	1980-85	1985-88	1960-88
U.S.S.R.	10.0	-11.4	19.6	9.0	-11.7	13.7	3.5
U.S.A.	13.8	-6.0	5.2	-6.8	29.0	-19.2	3.2
Yogoslavia	12.0	5.0	-22.5	16.9	0.3	24.5	3.6
Saudi Arabia	-14.5	32.1	10.1	-4.5	13.8	-10.0	4.3
Italy	6.5	-18.6	11.2	-3.7	1.6	15.4	0.5
Czechoslovakia	9.6	-1.5	-1.2	-4.0	2.5	9.5	1.9
Sri Lanka	11.2	-26.2	-65.5	176.4	-16.0	43.4	-3.7
Japan	106.5	-6.9	4.7	5.0	1.7	21.7	17.0
Canada	20.5	-5.3	7.0	-1.0	-1.9	0.5	3.2
Iran	65.2	25.6	-2.3	-1.0	-25.8	31.8	10.6
Aden	-3.4	-17.2	-4.3	-16.7	4.1	-	-
Kuwait	25.4	10.6	-3.2	-1.3	10.2	-42.7	0.8
Singapore	-	-	39.7	-8.0	5.0	-27.8	2.5
Others	3.2	-4.1	2.8	3.0	-0.5	23.8	3.0
Total	7.8	-6.9	5.1	2.5	1.9	6.3	2.4

Source: Computed and Compiled from Table- 11

During the periods 1970-75 Singapore recorded much better compound growth rate as compared to the rate of growth registered in USSR, Italy, Saudi Arabia, Canada, USA and Japan. While countries like Sri Lanka, Yogoslavia, Aden, Kuwait, Iran and Czechoslovakia have witnessed negative annual average compound growth rates during the same period. In the years 1975-80 Sri Lanka was the country to which exports of spices recorded highest compound growth rate followed by Yogoslavia, USSR and Japan. During the same period exports of spices to Aden, Singapore, USA, Saudi Arabia, Czechoslovakia, Italy, Kuwait, Canada and Iran registered negative annual average compound growth rates.

Between 1980 and 1985 USA has recorded fairly well compound growth rate as compared to the growth rates registered in case of Saudi Arabia, Kuwait, Singapore, Aden Czechoslovakia, Japan Italy and Yogoslovia. Simultaneously, the annual average compound growth rates were negative in case of exports to Iran, Sri Lanka, USSR and Canada.During the periods 1985-88 exports to Sri Lanka have registered exceedingly well compound growth rate in comparison to Iran,Yogoslavia,Japan,

Italy, U.S.S.R., Czechoslovakia and Canada. At the same time Kuwait, Singapore, U.S.A. and Saudi Arabia have registered negative annual average compound growth rates. On the whole, the annual average compound growth rate in exports of spices to Japan was highest followed by exports to Iran, Saudi Arabia, Yogoslavia, U.S.S.R., U.S.A., Canada, Singapore, Czechoslovakia, Kuwait and Italy during the period 1960-1988.

It has also been brought out from table 12 that the annual average compound growth rates in exports of spices to all the destinations have highly fluctuated between 1960-65 and 1985-88. However, Japan and Yogoslavia witnessed positive compound growth rates during the entire period of study except 1965-70 and 1970-75 respectively. The countries such as Aden, Sri Lanka, Czechoslovakia, Kuwait, Saudi Arabia, Canada, Singapore and Iran the annual average compound growth rates were highly faltering during 1960-65 to 1985-88 and needs concerted efforts to maintain steady supply.

Conclusion

From the foregoing pages it has emerged that the world export and India's exports of spices have increased significantly over the years under review. However, the rate of increase in India's spices export has been low as compared to the

rate of rise in world's spices export. As a result, the share of India in world's export of spices (value) has declined (20.5 percent to 9.8 percent) between 1970 and 1988. Besides, the share of spices in total export earnings of India has also gone down despite the fact that the share of spices in total agricultural export earnings has increased during 1960-61 to 1988-89. So far as composition of spices export is concerned, it witnessed a considerable snift over the years under review. During 1960-61 chillies and ginger accounted for more than 30 percent of the total quantity exported, but during 1988-89 tneir share stood at only 11 percent. Another remarkable change was that during 1960-61 turmeric accounted for only 5.0 percent of the total quantity exported, while during 1988-89 its share was 17.5 percent. In case of composition of value-earned, remarkable diversification was seen in regard to pepper and small cardamom. During the periods 1960-61 pepper accounted for nearly 52 percent of the total export earnings from spices, while during 1988-89 its snare was more than 66 percent. Contrary to this,during 1960-61 small cardamom accounted for 22.6 percent of the total export earnings from spices while during 1988-89 its share stood at only 3.6 percent.

It has further brought out that the overall growth in production of spices is higher than export of spices. However,

a very low percentage is left for export due to higher domestic consumption. As a result, India has not been able to meet the world demand.

On examination of the direction of India's spices exports it is seen that there has not been any noticeable change in export pattern of spices to various countries of the world except in case of Sri Lanka, Aden and Japan. Sri Lanka and Aden were the major importers of Indian spices during the decade of the 1960s. However, during the last decade i.e. 1980s the export of spices to these countries have declined drastically. Contrary to this, export of Indian spices to Japan were negligible during sixtees, while during eightees it has got momentum.

Chapter - V

EXPORT PERFORMANCE OF PEPPER

Chapter - V

EXPORT PERFORMANCE OF PEPPER

India has been known from the ancient times as one of the important producers and exporters of spices in the world. Although a host of spices are exported from India but pepper, which at one time was euphemistically called 'Black Gold', occupies the place of pride among all the spices exported. Pepper plant was first domesticated by Kerala farmers in Malabar region as a part of their indigeneous agro-forestry system, nearly 3000 years back.[1] The world history bears the testimony of many stories on this 'King Spice' making facinating social, economic, political and historical viscissitudes in the world trade.

Indian pepper is regarded as the best in quality all over the world. The demand for it has been increasing considerably in all the importing countries. After meeting the domestic needs, substantial quantities are exported. Pepper is the largest foreign exchange earner among all spices and the same accounts for more than two-third of the total export earnings from all spices. In 1988-89 India exported 94.4 thousand tonnes of spices valued at Rs. 282.8 crores, while pepper alone accounted for 41 thousand tonnes valued at Rs. 187.7 crores

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1. Das, K. Prafulla, "Future For Black Pepper is not that Bleak" Agricultural Situation in India, New Delhi, Jan., 1988, p-889.

i.e. 43.4 percent and 66.4 percent of the total quantity and value earned respectively. In the light of the above, the present chapter describes in brief the significance of pepper in the world trade. It further analyses the trends in global export of pepper and the relative share of India and other major exporting countries in the total world export of pepper. It also examines the trends in India's export of pepper, the trends in percentage share of pepper in total spices export earnings, the trends in percentage share of export to production of pepper and the trends in direction of pepper export from India.

Trends In World Exports:

India had the monopoly in the world trade of pepper until the beginning of the nineteenth century and pepper was one of the prime sources of fabuluous foreign exchange for the country. The consumption and popularity of spices particularly of black pepper gave an impetus to the production and export of this spice in Indonesia, Brazil and Malaysia. As a consequence, India lost her monopoly position both in respect of production and export of pepper. However, in recent years (1986 and onwards) India has been regaining her lost glory and has emerged as the largest producer and exporter of pepper in the world.

It is pertinent to note here that more than 97 percent of the global export of pepper (quantity) is confined to five tropical nations namely India, Indonesia, Brazil, Malaysia and Madagascar (appendix I). Few years ago, countries like Indonesia, Brazil and Malaysia held control over the world's pepper export (quantity). Till the end of 1985, they together exported about 80 percent of the total international import requirements (in volume) leaving the balance of 20 percent for India.[1] But now the situation has improved and India has become the top exporter with more than 26 percent share. In 1988 the total world exports of pepper was 179.8 thousand tonnes. Out of which India exported 47.3 thousand tonnes i.e. 26.3 percent of the total world export followed by Indonesia and Brazil i.e. 41.6 thousand tonnes (23.1 percent) and 24.4 thousand tonnes (13.6 percent) respectively. In terms of value, the share of India stood at 27.4 percent, while Indonesia and Brazil accounted for 23.6 percent and 9.8 percent of the total world exports respectively.

Table 1 gives the trends in export of pepper (quantity) from India, Indonesia and Brazil during 1960 and 1988.

It is seen from the table 1 that world export of pepper recorded an overall increase of 2.9 times between

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1. Financial Express (N. Delhi) March 6, 1989, p.1

Table - 1

Trends In Export of Pepper (Quantity) From Major Exporting Countries Between 1960 and 1988

Q = ('000 tonnes)

Year	World	India	Indonesia	Brazil
1960	62.3	18.7	12.6	2.5*
1965	95.1	22.7	12.3	7.4
1970	112.7	19.4	2.6	9.0
1975	132.7	24.0	15.3	17.9
1980	167.2	26.3	29.6	32.0
1985	160.4	19.5	26.2	24.7
1986	174.3	49.8	29.6	22.0
1987	151.9	32.8	30.0	25.5
1988	179.8	47.3	41.6	24.4
% Increase or decrease over 1960	188.6	152.9	230.2	876.0

*Unofficial Figure

Source: 1. Pepper Statistical Year Book (1986), Pub: I.P.C. Jakarta, Indonesia.

2. FAO Trade Year Book (Various Issues) and data supplied by Tropical Development Research Institute, London (U.K.)

1960 and 1988. However, India registered a rise of 2.5 times during the same period. Whereas Indonesia and Brazil witnessed a growth of 3.3 times and 9.8 times respectively during the period under reference. This means that the rate of increase in Export of pepper from Brazil is much higher than the rate of increase in world, India and Indonesia's exports. It is surprising to note that inspite of exporting largest quantity the growth rate in India's export has been the lowest. Table 2 shows the trends in export of pepper from major exporting countries (value) between 1960 and 1988.

From the table 2 is is seen that total value of world export of pepper registered an overall rise of 8.7 times during 1960 to 1988. India's total exports of pepper showed an overall increase of 8 times. Whereas Indonesia and Brazil witnessed a growth of 13.8 times and 10 times in terms of value respectively during the same period (the base year is 1965 in case of Brazil). It means that the rate of increase in value of Indonesia's export is higher than the rate of increase in world, India and Brazil's export. Although India, Indonesia and Brazil have done well in regard to export earnings but when the growth rates in volume and value earned of pepper export are compared, it is seen that Indonesia and India fetched much better price than Brazil. Table 3 shows trends in relative share of India, Indonesia and Brazil in world export (quantity & value) of pepper during 1960 to 1988.

Table - 2

Trends In Export of Pepper (Value) From Major Exporting Countries Between 1960 and 1988

V = (US $ Million)

Year	World	India	Indonesia	Brazil
1960	70.5	21.2	10.5	N.A.
1965	69.4	20.3	9.8	6-0
1970	95.5	22.3	3.2	8.2
1975	197.8	40.0	22.8	29.2
1980	286.3	47.1	50.0	54.7
1985	464.0	62.0	78.4	79.0
1986	698.8	200.0	136.9	93.0
1987	702.6	154.1	148.2	123.5
1988	615.0	168.8	144.9	60.1
% Increase or decrease over 1960	772.3	696.2	1280.0	901.7*

*this percentage is calculated over 1965

Source: Same as table -1.

Table - 3

Trends In Relative Share of India, Indonesia and Brazil (Quantity&Value) In World Export of Pepper Between 1960 and 1988

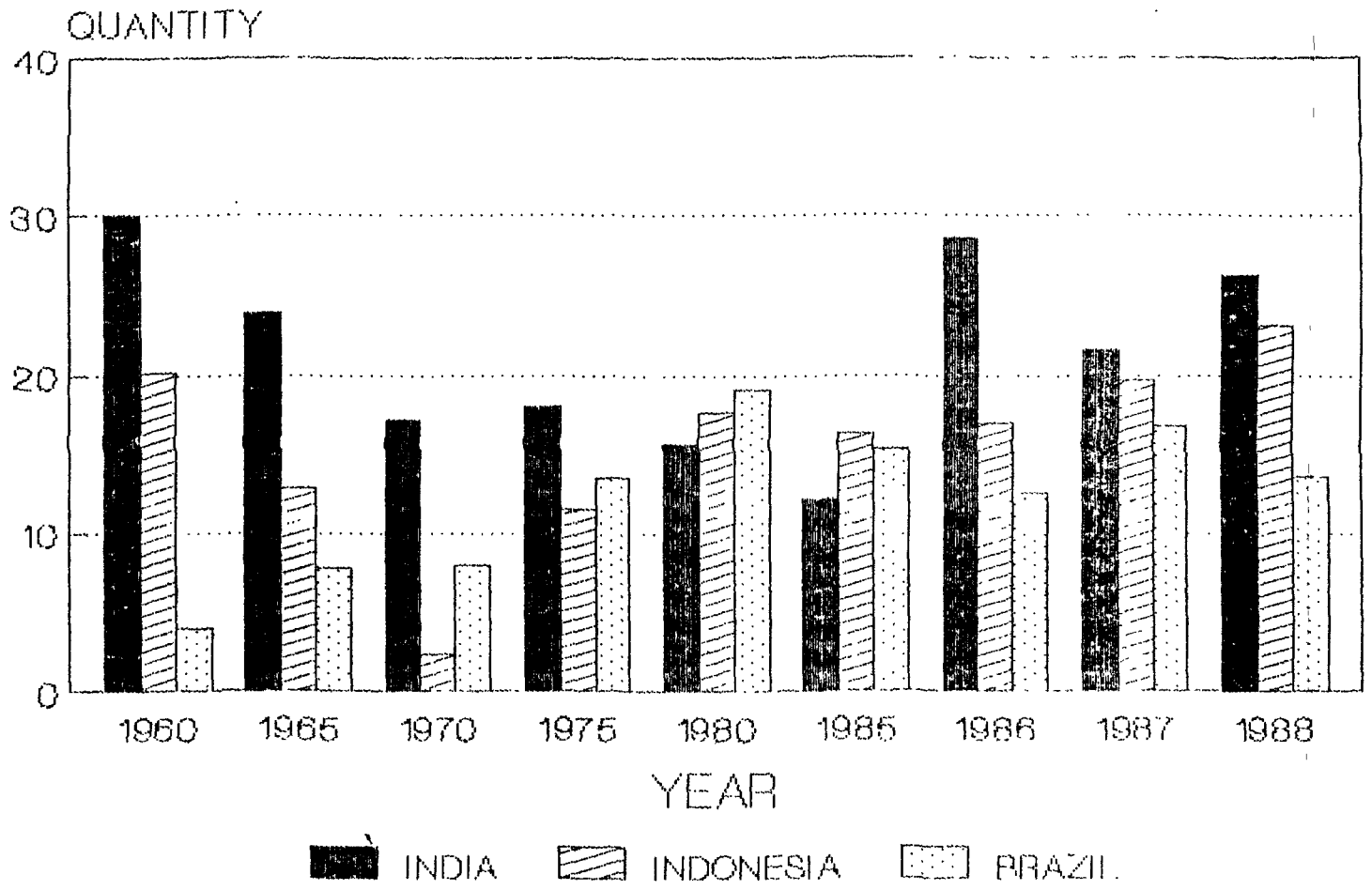
(in %)

Year	Quantity			Value		
	India	Indonesia	Brazil	India	Indonesia	Brazil
1960	30.0	20.2	4.0	30.0	14.9	-
1965	23.9	12.9	7.8	29.3	14.1	8.6
1970	17.2	2.3	8.0	23.4	3.4	8.6
1975	18.1	11.5	13.5	20.2	11.5	14.8
1980	15.7	17.7	19.1	16.5	17.5	19.1
1985	12.2	16.3	15.4	13.4	16.9	17.0
1986	28.6	17.0	12.6	28.6	19.6	13.0
1987	21.6	19.7	16.8	21.9	21.0	17.6
1988	26.3	23.1	13.6	27.4	23.6	9.8

Source: Compiled and Computed From Table 1 & 2

CHART - 1

RELATIVE SHARE OF INDIA,INDONESIA AND BRAZIL IN WORLD EXPORT OF PEPPER BETWEEN 1960 & 1988



(QUANTITY)

CHART - 2

RELATIVE SHARE OF INDIA,INDONESIA AND BRAZIL (VALUE) IN WORLD EXPORT OF PEPPER BETWEEN 1960 AND 1988

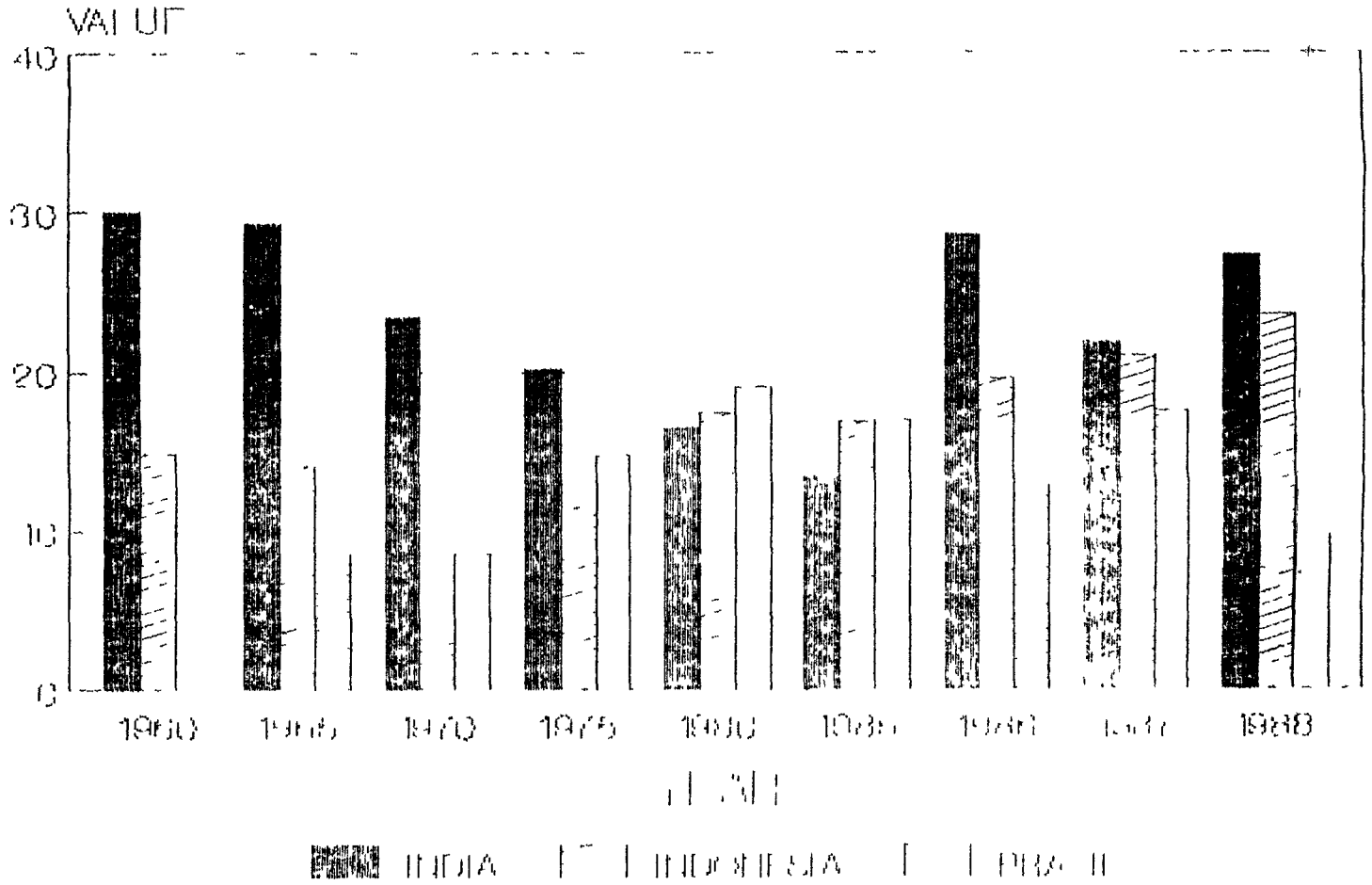


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Table 3 reveals that the share of India in world export of pepper has been the highest followed by Indonesia and Brazil in respect of quantity and value earned both during the period under review. However, India's share in the total world export of pepper has declined between 1960 and 1988. Whereas Indonesia and Brazil witnessed considerable rise in their respective shares in global pepper export during the period (Chart-1). This clearly means that the rate of growth in export of pepper from Indonesia and Brazil is faster than India. The same trend is seen in case of value also (Chart-2).

Trends In Annual Average Compound Growth Rates:

If we throw a glance on annual average compound growth rates of world, India, Indonesia and Brazil in regard to total volume of pepper exports (Table-4), it appears that Brazil has done fairly well and as a result the compound growth rate was fairly high as compared to India and world's total volume of pepper export during 1960-65. However, Indonesia's total volume of pepper export witnessed negative compound growth rate during the same period. During 1965-70 also Brazil registered slightly higher growth rate than the world. While India and Indonesia recorded negative growth rates. The period 1970-75 was the best period for world, India, Indonesia and Brazil. However, Indonesia performed exceedingly well as compared to world, India and Brazil. The same trend were prevailed during 1975-80. Contrary to this, the period 1980-85

Table - 4

Trends In Annual Average Compound Growth Rates of World, India Indonesia and Brazil's Total Volume of Pepper Export From 1960 To 1988

Year	World Annual Average Compound Growth Rates	India Annual Average Compound Growth Rates	Indonesia Annual Average Compound Growth Rates	Brazil Annual Average Compound Growth Rates
1960-65	8.8	4.0	-0.4	24.2
1965-70	3.5	-3.1	-26.7	4.0
1970-75	3.3	4.3	42.5	14.7
1975-80	4.7	1.8	14.1	12.3
1980-85	-0.8	-5.8	-2.4	-5.0
1985-88	3.9	34.4	16.7	-0.4
1960-88	3.9	3.4	4.4	8.5

Source: Computed and Compiled From Table -1

was the worst for world, India, Indonesia and Brazil. During this period all recorded negative annual average growth rates. But the period 1985-88 was much better for India and Indonesia's exports. However, during this period Brazil witnessed negative growth rate. On the whole, Brazil has done better than world, India and Indonesia's exports (quantity).

Table 5 indicates the trends in annual average compound growth rates of world, India, Indonesia and Brazil in regard to total value of pepper export during 1960 and 1988.

From the table 5 it is seen that on the whole Brazil has done well as compared to world, India and Indonesia's export during the period under review. During the period 1970-75, however, Indonesia's exports recorded the highest annual average compound growth rate as compared to Brazil, India and the world. Another remarkable feature is that during 1985-88 India registered much better compound growth rate as compared to the growth rate recorded by Indonesia and world. Whereas Brazil showed negative annual average growth rate during the period (Chart.3).

Trends In India's Exports:

India has been the major supplier of pepper to the world market from the time immemorial. It is the most important spice of India which is very much popular in the international

Table - 5

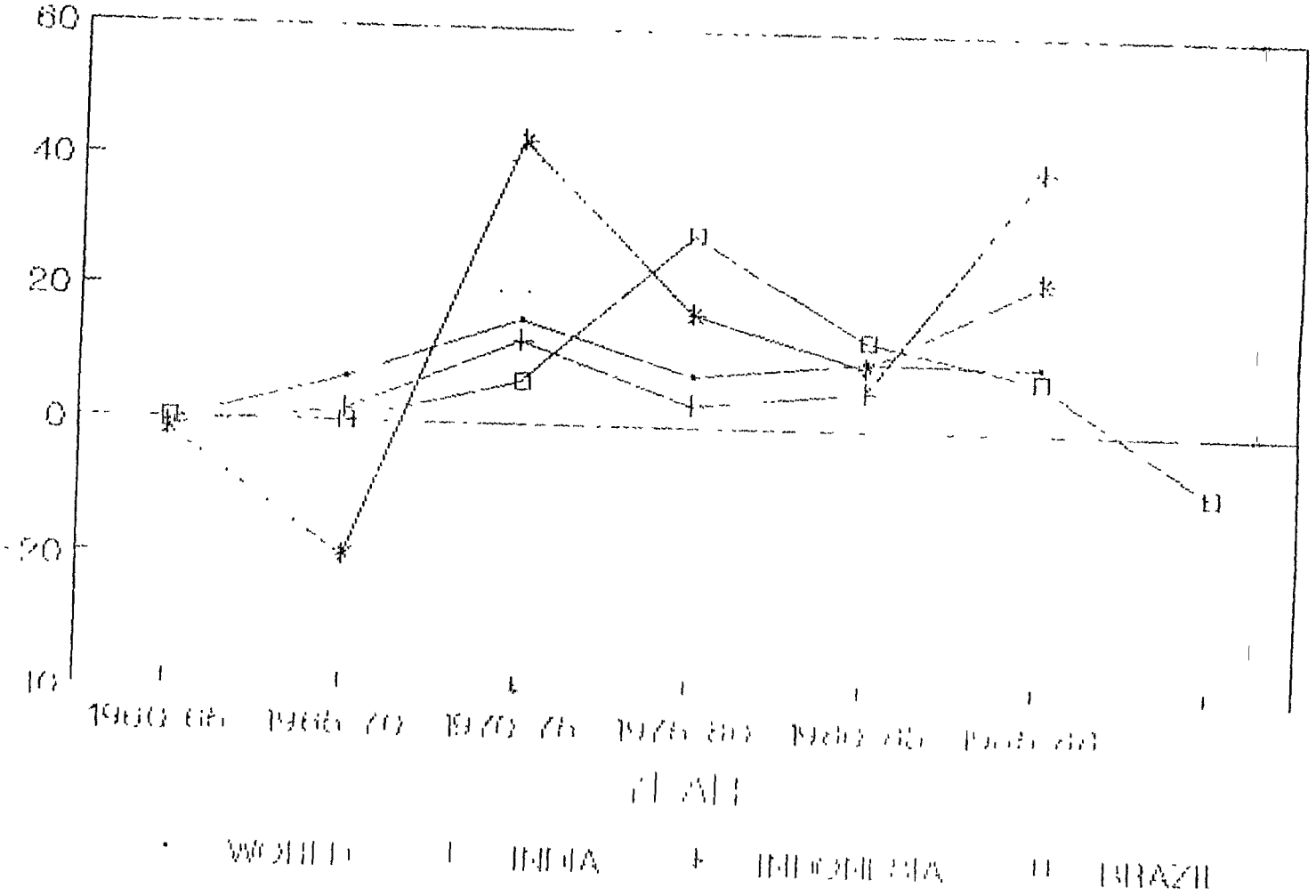
Trends In Annual Average Compound Growth Rates of World , India, Indonesia and Brazil's Total Value of Pepper Export From 1960 to 1988

Year	World Annual Average Compound Growth Rates	India Annual Average Compound Growth Rates	Indonesia Annual Average Compound Growth Rates	Brazil Annual Average Compound Growth Rates
1960-65	-0.3	-0.9	-1.4	-
1965-70	6.6	1.9	-20.0	6.4
1970-75	15.7	12.4	43.0	28.9
1975-80	7.7	3.3	17.0	13.4
1980-85	10.1	5.7	9.4	7.6
1985-88	9.8	39.6	22.7	-8.7
1960-88	8.0	7.7	9.8	10.5

Source: Computed and compiled from Table-2

CHART - 3

ANNUAL AVERAGE COMPOUND GROWTH RATES OF WORLD ,INDIA,INDONESIA & BRAZIL'S TOTAL VALUE OF PEPPER EXPORTS FROM 1960TO1988



PLAN

WORLD INDIA INDONESIA BRAZIL

spice trade accounting for more than 26 percent of the global exports in volume and value (Table 1). So far as the share of pepper in total spices exports from India is concerned, on an average, it accounts for about 50 percent of the total quantity exported and 70 percent of the total value earned. In 1988-89 the share of pepper in total spices export earnings was 66.4 percent. Table 6 gives the trends in export of pepper from India (quantity, value and unit value) from 1960-61 to 1988-89.

Data set out in table 6 reveal that total quantity of pepper exported from India recorded an overall increase of 2.4 times between 1960-61 and 1988-89. whereas total value earned from exports of pepper registered a rise of more than 22.0 times during the same period. This means that the rate of increase in export earnings has been much higher than the rate of increase in volume of export. The major contributory factor for this sharp rise in export earnings has been the higher unit value realisation in international market.

Table 7 shows the trends in annual average compound growth rate of pepper export from India (quantity and value) during 1960-65 to 1985-88.

It is seen from the table 7 that during 1960-65 total volume of pepper export has done fairly well as its annual average compound growth rate was better as compared to

Table - 6

Trends In Export of Pepper From India (Quantity & Value) During 1960-61 to 1988-89

Q = ('000 tonnes)
V = (Rs. Crores)

Year	Quantity Exported	Value Earned	Unit Value (Rs. per Kg.)
1960-61	17.2	8.5	4.94
1965-66	26.3	11.1	4.22
1970-71	18.0	15.2	8.44
1975-76	24.2	33.8	13.97
1980-81	25.3	36.8	14.54
1981-82	20.6	28.0	13.59
1982-83	22.6	29.3	12.96
1983-84	25.8	41.3	16.00
1984-85	25.4	60.5	23.82
1985-86	37.6	172.4	45.85
1986-87	37.0	200.3	54.06
1987-88	41.0	240.6	58.55
1988-89*	41.0	187.8	45.80
% Increase or Decrease over 1960-61	138.4	2109.4	827.1

*Provisional Figures

Source: Upto 1983-84-Directory of Exporters of Spices (1985) Published by Spices Export Promotion Council, Cochin 1984-85 to 1988-89 Customs List-supplied by Spices Board, Cochin.

Table - 7

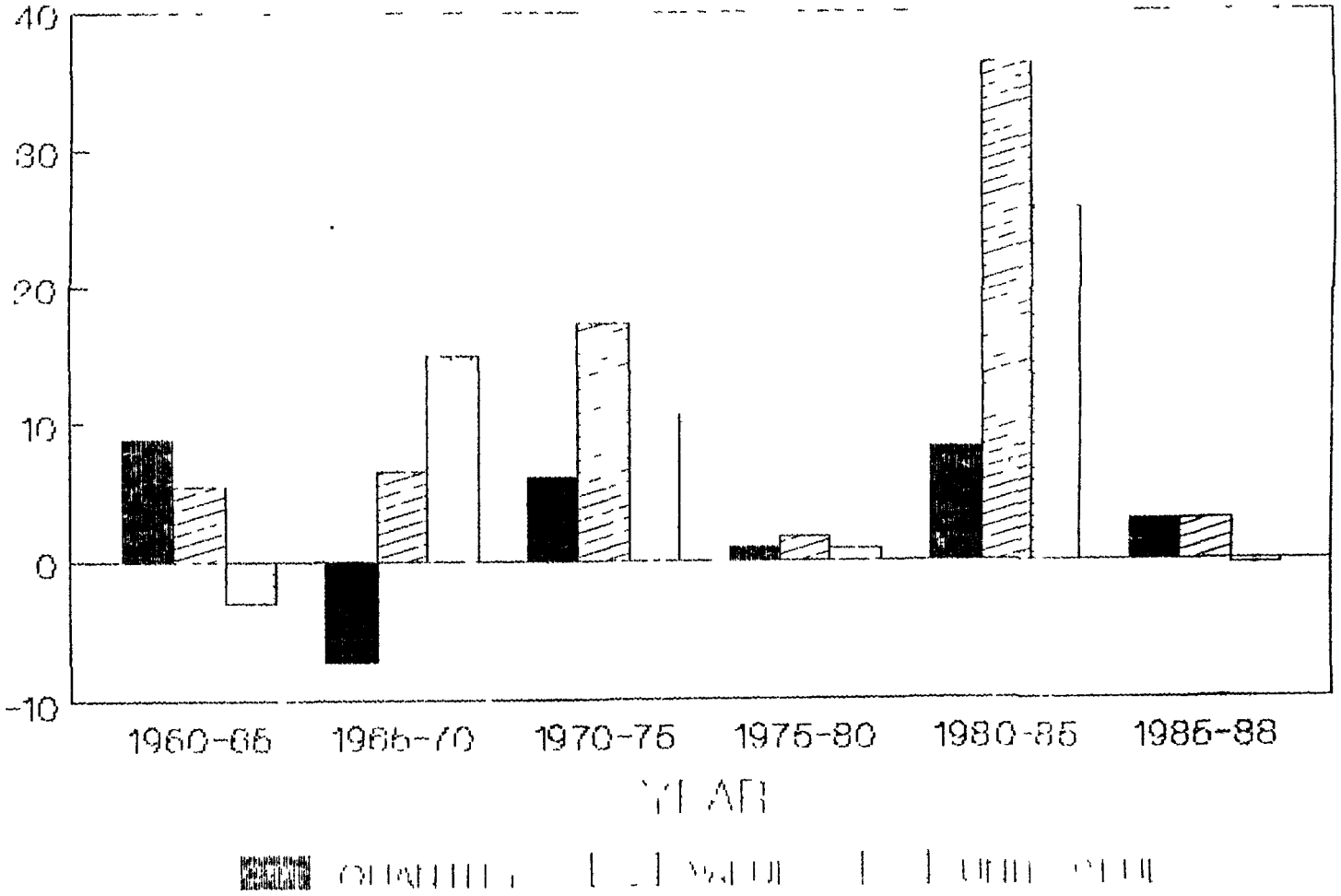
Trends In Annual Average Compound Growth Rates In Total Volume, Total Value and Unit Value of Pepper Exports From India During 1960-65 to 1985-88

Year	Total Volume Annual Average Compound Growth Rates	Total Value Annual Average Compound Growth Rates	Unit Value Annual Average Compound Growth Rates
1960-65	8.9	5.4	-3.1
1965-70	-7.3	6.5	14.9
1970-75	6.0	17.3	10.6
1975-80	0.9	1.7	0.8
1980-85	8.2	36.2	25.8
1985-88	2.9	2.9	-0.4
1960-88	3.2	11.7	8.3

Source: Computed and compiled from Table -6

CHART - 4

ANNUAL AVERAGE COMPOUND GROWTH RATE IN QUANTITY, VALUE AND UNIT VALUE OF PEPPER EXPORTS FROM INDIA DURING 60-65 TO 85-88



total value of pepper export. Between 1965 and 1970, however, total volume of pepper export registered negative annual average compound growth rate. Whereas total value of pepper export witnessed fairly high compound growth rate during the years under review. The period 1980-85 was the best period for both the volume and value of pepper export but the growth rate was exceedingly high and therefore remarkable in case of total value of pepper export. Another noteworthy feature in regard to total value of pepper export is that it recorded positive compound growth rates during the entire period of study. On the whole, total value of pepper export has done much better than the total volume of pepper export so far as annual average compound growth rates are concerned. This has been mainly because of higher growth rates in case of unit value realisation of pepper in international market(Chart-4).

Table 8 shows the trends in total export earnings from spices, total export earnings from pepper and the relative share of pepper in total export earnings from spices during 1960-61 to 1988-89.

It is clearly visible from the table 8 that total export earnings from spices recorded an overall increase of more than 17 times in 1988-89 over 1960-61. Similarly, total earnings from export of pepper rose by more than 22 times

Table - 8

Trends In Relative Share of Pepper In Total Earnings From Exports of Spices During 1960-61 to 1988-89

(Rs. Crores)

Year	Total Export Earnings from spices	Export Earnings from Pepper	% share of Pepper in Total
1960-61	16.4	8.5	51.8
1965-66	23.0	11.1	48.2
1970-71	38.8	15.2	39.2
1975-76	72.7	33.8	46.5
1980-81	117.0	36.8	31.4
1981-82	92.3	28.0	30.3
1982-83	92.4	29.3	31.7
1983-84	111.7	41.3	37.0
1984-85	209.0	60.5	28.9
1985-86	282.5	172.4	61.0
1986-87	281.9	200.3	71.0
1987-88	298.0	240.5	80.7
1988-89*	282.7	187.8	66.4
% Increase/ decrease over 1960-61	1623.8	2109.4	14.6

*Provisional Figures

Source: Upto 1983-84 - Spices News Letter, Nov., 1985, p-15

1984-85 - 1988-89-Customs Lists-Supplied by Spices Board, Cochin.

during the same period. It means that pepper export has been increasing more rapidly than the total spices export. One of the main reasons is that there has been a slow growth in exports of other spices such as cardamom as compared to pepper. It is also evident from the table that the share of pepper in total exports of spices has risen to 66.4 percent from 51.8 percent, an increase of 14.6 percent during the period under study. It is also pertinent to note here in 1987-88 the snare of pepper was highest ever i.e. 80.7 percent which has come down to 66.4 percent in 1988-89 due to decline in earnings from exports of pepper.

Table 9 shows tne trends in annual average compound growth rate in earnings from export of spices and earnings from export of pepper from 1960-65 to 1985-88.

From the table 9 it appears that export earnings of pepper has done fairly well as it has registered higher annual average compound growth rate as compared to the rate recorded by total spices export earnings between 1960 and 1988. However, during 1960 to 1970 export earnings of total spices witnessed better compound growth rates than export earnings of pepper. It is remarkable to see that during 1980-85 export earnings of spices and export earnings of pepper both recorded highest annual average growth rates. But the

Table - 9

Trends In Annual Average Compound Growth Rates In Spices Export Earnings and Pepper Export Earnings During 1960-65 to 1985-88

Year	Spices Export Earning	Pepper Export Earnings
	Annual Average Compound Growth Rates	Annual Average Compound Growth Rates
1960-65	7.0	5.4
1965-70	11.0	6.5
1970-75	13.4	17.3
1975-80	10.0	1.7
1980-85	19.3	36.2
1985-88	Neg.	2.9
1960-88	10.7	11.7

Source: Computed and compiled from Table -8

growth rate was much higher in case of pepper export earnings as compared to total spices export earnings.

Trends In Share of Export to Production of Pepper:

In the sixtees, much of the production of pepper was consumed within the country and as a result the share of export in the total production was stood at 61 percent. However, there has been a radical shift in regard to this phenomena. Now it has emerged as one of the export oriented commodities. Table 10 indicates the trends in percentage share of export to total production of pepper between 1960-61 and 1988-89.

It is seen from table 10 that the total production of pepper increased by 1.6 times in 1988-89 over 1960-61. While total quantity of pepper exported rose by more than 2.0 times during the same period. This shows that the rate of increase in quantity exported is higher than the rate of rise recorded in total production. Consequently, the share of export in total production increased by more than 33.0 percent (i.e. from 61.4 percent to 94.5 percent) during the period under review (Chart-5) This increasing trend in the relative share of export to total production gives clear cut

Table - 10

Trends In Percentage Share of Export to Production of Pepper Between 1960-61 to 1988-89

('000 tonnes)

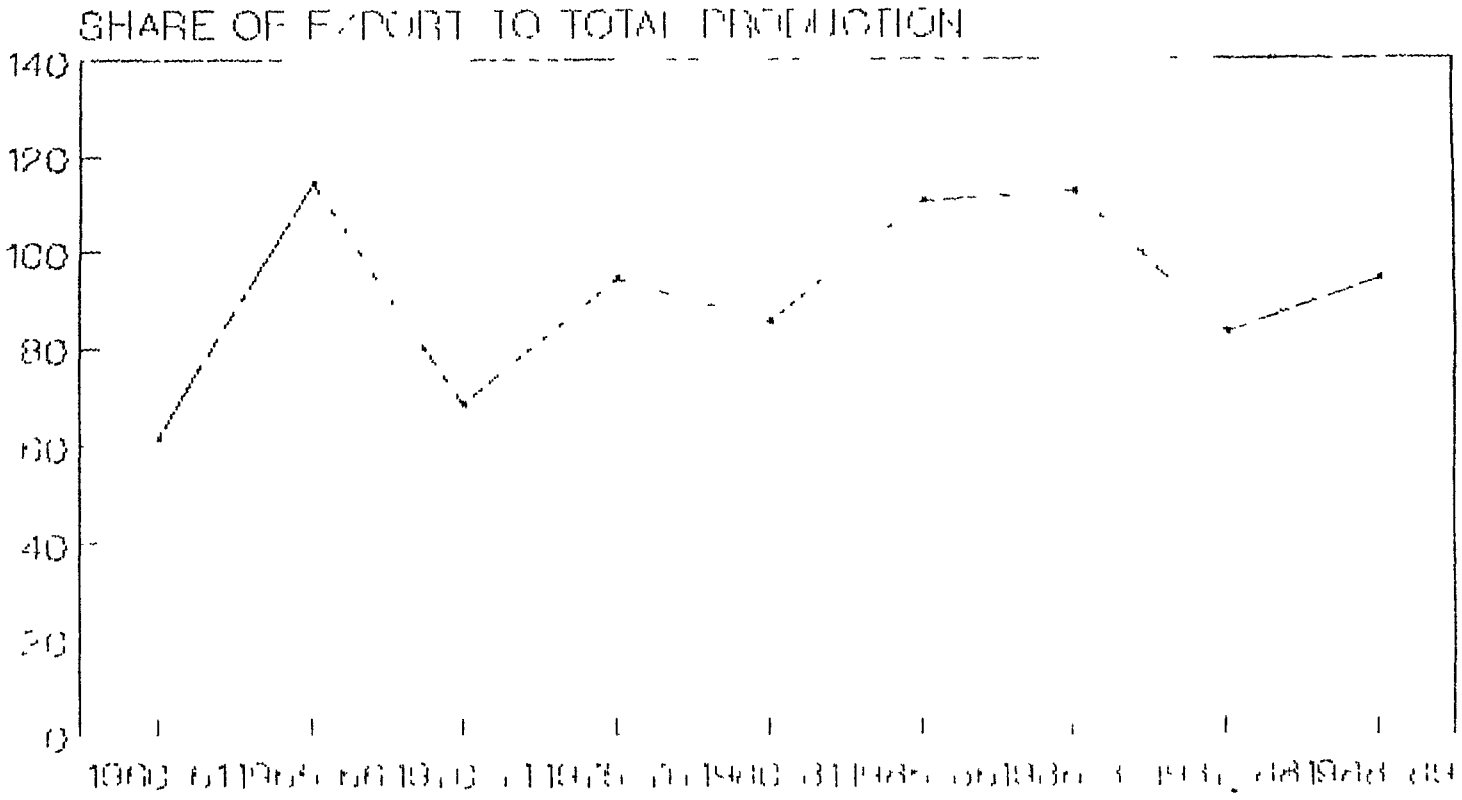
Year	Production	Export	% share of Export to Production
1960-61	28.0	17.2	61.4
1965-66	23.0	26.3	114.3
1970-71	26.2	18.0	68.7
1975-76	25.6	24.2	94.5
1980-81	29.5	25.3	85.7
1981-82	29.2	20.6	70.5
1982-83	26.6	22.6	85.0
1983-84	22.7	25.8	113.7
1984-85	18.2	25.4	139.6
1985-86	34.0	37.6	110.6
1986-87	32.9	37.0	112.5
1987-88	49.3	41.0	83.2
1988-89*	43.4	41.0	94.5
% Increase/ decrease over 1960-61	55.0	138.4	33.1

*Provisional Figures

Source: Production-Directorate of Economics and Statistics, New Delhi.
Export - Same as table-6

CHART - 5

RELATIVE SHARE OF EXPORT TO TOTAL PRODUCTION OF PEPPER FROM 1960-61 TO 1988-89



indications that pepper has been attaining export orientation and also has been earning valuable foreign exchange for the country.

Trends In Annual Average Compound Growth Rates:

Table 11 gives the trends in annual average compound growth rates in total export and total production of pepper from India from 1960-65 to 1985-88.

If we throw a glance at table 11 it is clear that annual average compound growth rates of total production and total export of pepper have been highly fluctuating during the period under reference. However, total export of pepper has done fairly well as it has registered better compound growth rates as compared to the rates recorded by total production of pepper between 1960 and 1988.

Direction of Pepper Exports:

Indian pepper is exported to a large number of countries in the world. The principal importers of Indian pepper are U.S.S.R., U.S.A., Yogoslavia, Saudi Arabia, F.R.G., Italy, G.D.R., France and Canada. Few years ago exports of pepper to U.S.A. witnessed a decline because of the ban imposed on Indian pepper by Food And Drug Administration (F.D.A.) of U.S.A.levelling the charge of adulteration.[1] However, this ban

1. Mathew, K.Mony, "Hot Climb Abroad", Financial Express (Delhi), March 6, 1989, p-1.

Table - 11

Trends In Annual Average Compound Growth Rates In Total Export and Total Production of Pepper Between 1960-65 and 1985-88

Year	Production Annual Average Compound Growth Rates	Export Annual Average Compound Growth Rates
1960-65	-3.9	8.9
1965-70	2.5	-7.3
1970-75	-0.5	6.0
1975-80	2.9	0.9
1980-85	2.9	8.2
1985-88	8.5	2.9
1960-88	1.6	3.2

Source: Computed and compiled from Table - 10

has been lifted by F.D.A. after continuous negotiations. Polland also imports substantial quantities of pepper from India. However, after 1985-86 the imports of pepper by Polland has also declined. Japan, Egypt, Singapore, U.K., Spain, Morocco and U.A.E. are the other countries which import significant quantities of pepper from India. Table 12 shows the trends in country-wise exports of pepper from India during 1960-61 to 1988-89.

Data set out in table 12 show that total export of pepper from India to U.S.S.R. has gone up by 2.5 times between 1960-61 and 1988-89. Similarly, U.S.A., Yogoslavia, Saudi Arabia, and F.R.G. witnessed a rise of 1.3 times, 2.7 times, 4.1 times and 9.0 times respectively during the same period. Likewise Italy, G.D.R., Czechoslovakia, France, Polland, Canada, Japan and Egypt have also recorded an overall increase of 1.1 times, 4.4 times, 1.1 times, 9.7 times, 1.3 times, 1.9 times, 300.0 times and 1.8 times respectively during the same period. However, total exports of pepper to Singapore and U.A.E. registered an overall decrease of less than 1.0 time. Total exports of pepper to U.K., Spain and Morocco witnessed an overall growth of 8.9 times, 7.8 times and 3.5 times respectively during tne period under reference.

Table -9

Trends In Annual Average Compound Growth Rates In Earnings From Exports of Spices And Earnings From Exports of Small Cardamom During 1960-65 To 1985-88

Year	Export Earnings From Spices Annual Average Compound Growth Rates	Export Earnings From Cardamom Annual Average Compound Growth Rates
1960-65	7.0	3.5
1965-70	11.0	20.5
1970-75	13.4	11.6
1975-80	10.0	12.2
1980-85	19.3	9.1
1985-88	Neg.	-42.2
1960-88	10.7	3.7

Source: Computed and Compiled From Table -8

growth rate was much better as compared to the growth rate in value of cardamom export.

Trends In Share of Export to Production of Cardamom(Small):

In the decade of sixties, seventies and early years of the eighties, India produced 3.5 to 4.5 thousand tonnes of small cardamom and 50 to 65 percent of the total production was exported annually. However, in recent years (1988-89) this share has declined alarmingly and consquently (table-10) cardamom has been loosing its export character.

Table 10 shows the trends in share of export to total production of small cardamom during 1960-61 to 1988-89.

It is seen from the table 10 that total output of cardamom has gone up by 1.2 times between 1960-61 and 1988-89. Whereas total export of cardamom has declined by less than one time during the same period. As a consequence, the share of cardamom export to total production of cardamom declined by 38.8 percent during the period under reference (Chart.5).

Trends In Annual Average Compound Growth Rates:

From the table 11 it appears that total production of cardamom and total export of cardamom registered negative annual average compound growth rates during 1960-65. However, during 1965-70 total production of cardamom witnessed fairly

Table -10

Trends In Percentage Share of Export to Production Of Small Cardamom During 1960-61 To 1988-89

('000 Tonnes)

Year	Production	Export	% of Export to Production
1960-61	3.4	2.0	58.8
1965-66	2.0	1.4	70.0
1970-71	3.2	1.7	53.1
1975-76	3.0	1.9	63.3
1980-81	4.4	2.3	52.3
1981-82	4.1	2.4	58.5
1982-83	2.9	1.0	34.5
1983-84	1.6	0.3	18.8
1984-85	3.9	2.4	61.5
1985-86	4.7	3.2	68.1
1986-87	3.8	1.4	36.8
1987-88	3.2	0.3	9.4
1988-89	4.0	0.8	20.0
% Increase/ decrease over 1960-61	17.6	-60.0	-38.8

Source: Spices Board, Cochin.

CHART - 5

RELATIVE SHARE OF EXPORT TO TOTAL PRODUCTION OF SMALL CARDOMOM DURING 1960-61 TO 1988-89

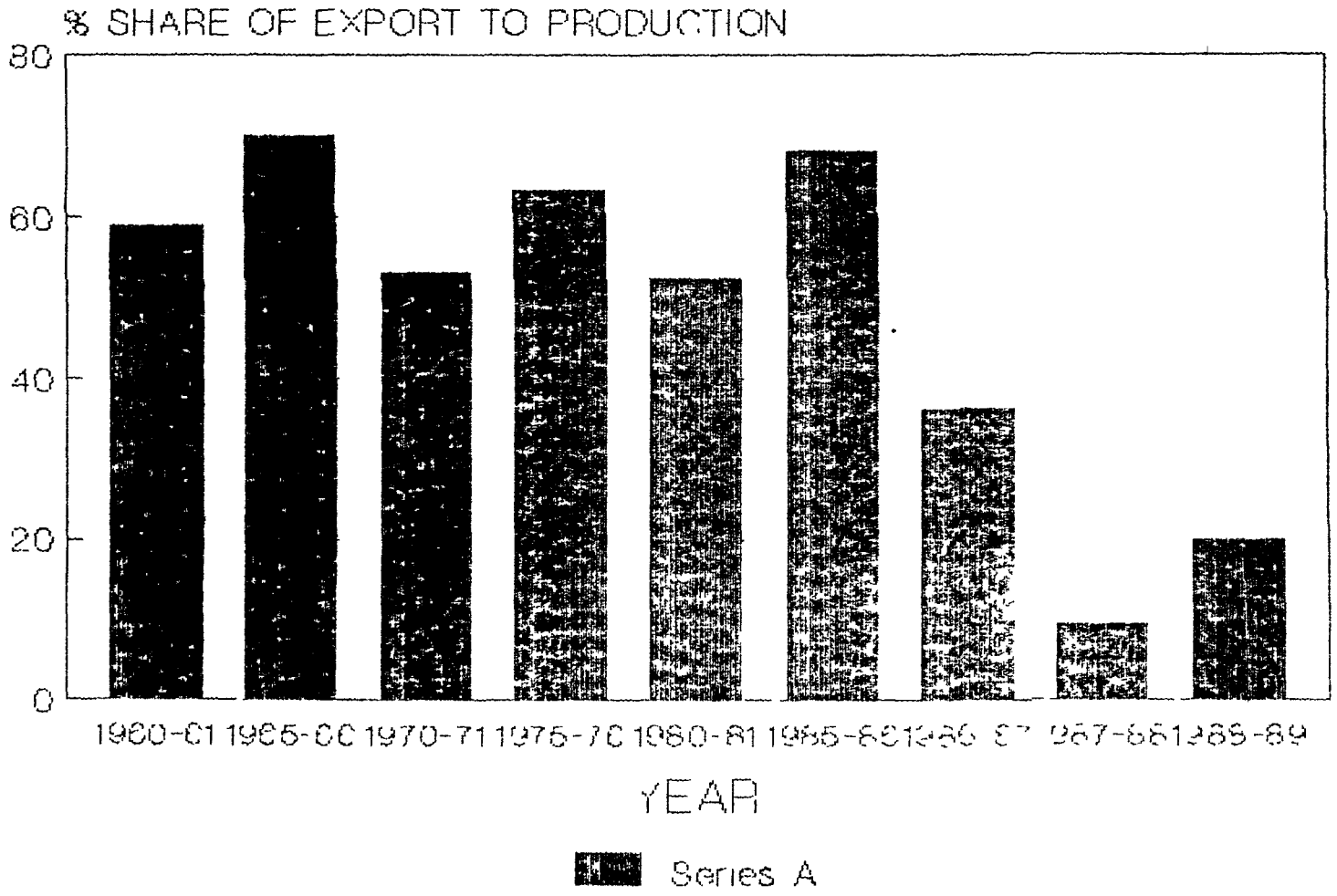


Table -11

Trends In Annual Average Compound Growth Rates In Export And Production of Small Cardamom During 1960-65 To 1985-88

Year	Production Annual Average Compound Growth Rates	Exports Annual Average Compound Growth Rates
1960-65	-10.3	-6.9
1965-70	9.9	4.0
1970-75	-1.3	2.2
1975-80	8.0	3.9
1980-86	1.3	6.8
1985-88	-5.2	-37.0
1960-88	0.6	-3.2

Source: Computed and Compiled from Table-10

well compound growth rate as compared to total export of cardamom. Between 1970 and 1988 total production of cardamom showed highly fluctuating trend so far as annual average compound growth rates are concerned, while total export of cardamom recorded steady growth rates except the period 1985-88. However, total production of cardamom has done somewhat better as it has recorded 0.6 compound growth, while total export of cardamom witnessed negative compound growth rate during the whole period of 1960 and 1988.

Direction of Cardamom Exports:

Indian cardamom is exported to nearly 30 countries of the world. The main importing countries are Saudi Arabia, Kuwait, U.S.S.R., Qatar, Bahrain, Japan, Singapore, U.A.E., Iran, Iraq, G.D.R., Oman, U.K., and Jordan. In 1988-89 U.S.S.R. alone accounted 49.7 percent of the total India's cardamom export followed by Saudi Arabia 20.0 percent, Japan 17.0 percent, Kuwait 6.1 percent, Singapore 3.0 percent and Qatar nearly 1.0 percent.

Table 12 shows the trends in country-wise export of cardamom (small) from India during 1960-61 to 1988-89.

It is seen from the table 12 that the overall trends in export of cardamom to major importing countries which are under study have been highly fluctuating over the periods under

Table -12

Trends In Country-wise Export of Cardamom (Small) From India During 1960-61 To 1988-89

Q = (M. Ton)

Country	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89	1960-61**
Saudi Arabia	474.0 (23.3)	358.0 (25.7)	537.0 (31.5)	613.0 (31.6)	885.0 (37.6)	1164.0 (35.6)	399.0 (27.6)	85.0 (31.5)	158.0 (20.0)	-66.7
Japan	29.0 (1.4)	15.0 (1.0)	81.0 (4.8)	57.0 (2.9)	93.0 (4.0)	134.0 (4.1)	95.0 (6.6)	92.0 (34.0)	134.0 (17.0)	36.2
Kuwait	195.0 (9.6)	267.0 (19.2)	577.0 (33.8)	690.0 (35.5)	765.0 (32.7)	1237.0 (37.8)	331.0 (22.9)	16.0 (5.9)	48.0 (6.1)	-75.4
U.S.S.R.	74.0 (3.6)	34.0 (2.4)	99.0 (5.8)	141.0 (7.3)	174.0 (7.4)	318.0 (9.7)	403.0 (27.9)	30.0 (11.1)	391.0 (49.7)	428.4
Qatar	N.A.	42.0 (3.0)	43.0 (2.5)	54.0 (2.8)	63.0 (2.7)	77.0 (2.4)	47.0 (3.2)	11.0 (4.0)	7.0 (0.9)	-83.3[a]
Bahtain	170.0 (8.4)	21.0 (1.5)	52.0 (3.0)	148.0 (7.6)	19.0 (0.8)	49.0 (1.5)	12.0 (0.8)	7.0 (2.6)	N.A.	-
Singapore	16.0 (0.8)	N.A.	24.0 (1.4)	20.0 (1.0)	21.0 (0.9)	35.0 (1.0)	36.0 (2.5)	11.0 (4.0)	24.0 (3.0)	50.0
U.A.E.	N.A.	N.A.	14.0 (0.8)	67.0 (3.5)	52.0 (2.2)	67.0 (2.0)	65.0 (4.5)	3.0 (1.1)	1.0 (0.1)	-
State of Oman	42.0 (2.0)	44.0 (3.2)	5.0 (0.3)	10.0 (0.5)	39.0 (1.7)	56.0 (1.7)	9.0 (0.6)	1.0 (Neg)	2.0 (0.3)	-95.2
Iran	62.0 (3.0)	18.0 (1.3)	25.0 (1.5)	13.0 (0.7)	69.0 (3.0)	-	3.0 (0.2)	1.0 (Neg)	-	-
G.D.R.	16.0 (0.8)	7.0 (0.5)	14.0 (0.8)	32.0 (1.6)	44.0 (1.9)	-	10.0 (0.7)	-	-	-
U.K.	45.0 (2.2)	18.0 (1.3)	18.0 (1.0)	21.0 (1.1)	9.0 (0.4)	7.0 (0.2)	1.0 (Neg)	-	Neg.	-
Jordan	N.A.	N.A.	N.A.	8.0 (0.4)	N.A.	20.0 (0.6)	-	-	-	-
Iraq	31.0 (1.5)	6.0 (0.4)	5.0 (0.3)	1.0 (Neg)	19.0 (0.8)	50.0 (1.5)	-	-	-	-
Others	880.0 (43.3)	561.0 (40.0)	211.0 (12.4)	66.0 (3.4)	85.0 (3.6)	58.0 (1.8)	36.0 (2.5)	13.0 (4.8)	22.0 (2.8)	- 97.5

* Provisional Figures, N.A.: Not Available , Neg.: Negligible

** Percentage Increase or decrease over 1960-61, Figures in brackets indicate percentages

a= Indicates decrease over 1965-66

Source: Upto 1980-81 D.G.C.I.&S Calcutta,
1985-86 to 1988-89 Daily List of Exports From Customs, Spices Board, Cochin

study. Out of 14 countries selected for comparative study, exports to only 3 countries namely U.S.S.R., Japan and Singapore have recorded considerable increase over the periods under reference. It means that India has been exporting lesser to its traditional markets.

Trends In Annual Average Compound Growth Rates:

If we have a look at table 13 it appears that export of cardamom to U.S.S.R. has done fairly well as it has recorded highest annual average compound growth rate as compared other countries which are under study between 1960 and 1988. During 1960-65 export of cardamom to Kuwait registered much higher compound growth rate than export to State of Oman. Whereas export of cardamom to rest of the countries such as Saudi Arabia, Japan, U.S.S.R., Bahrain, U.A.E., Iran, G.D.R., U.K., and Iraq witnessed negative annual average growth rates. However, during 1965-70 export of cardamom to State of Oman and Iraq recorded negative growth rates, while export of cardamom to the other major countries' registered fairly well growth rates. Between 1970 and 1975 export of cardamom to U.A.E.recorded highest compound growth rate, whereas exports to Japan, Singapore, Iran and Iraq suffered set back and thus witnessed negative compound growth rates. During 1975-80 exports to U.A.E., however, witnessed negative growth rate alongwith exports to Bahrain and Iran, while exports to rest

Table -13

Trends In Annual Average Compound Growth Rates In Country wise Export of Cardamom (Small) During 1960-65 to 1985-88

Country	1960-65	1965-70	1970-75	1975-80	1980-85	1985-88	1960-88
Saudi Arabia	-5.5	8.4	2.7	7.6	5.6	-48.6	-3.8
Japan	-12.4	40.1	-6.8	10.3	7.6	Nil	5.6
Kuwait	6.5	16.7	3.6	2.0	10.0	-66.1	-4.9
U.S.S.R.	-14.4	23.8	7.3	4.3	12.8	7.1	6.1
Qatar	-	0.5	4.7	3.1	4.1	-55.0	-
Bahrain	-34.2	19.9	23.3	-58.2	20.9	-	-
Singapore	-	-	-3.6	1.0	10.8	-7.3	1.5
U.A.E.	-	-	36.8	-4.9	5.2	-75.4	-
State of Oman	0.9	-35.3	14.9	31.3	7.5	-67.0	-10.3
Iran	-21.9	6.8	-12.3	39.6	-	-	-
G.D.R.	-15.2	14.9	18.0	6.6	-	-	-
U.K.	-16.7	Nil	3.1	-15.6	-4.9	-	-
Jordan	-	-	-	-	-	-	-
Iraq	-28.0	-3.6	-27.5	80.2	21.4	-	-
Others	-8.6	-17.8	-20.7	5.2	-7.4	-27.6	-12.3
Total	-7.3	4.2	2.6	3.8	7.0	-37.8	-3.3

Source: Computed and Compiled From Table-12

of the countries recorded fairly high compound growth rates. Between 1980 and 1985 the remarkable feature has been that export of cardamom to all the countries registered significant compound growth rates except export of cardamom to U.K. Contrary to this, export of cardamom to all the countries sustained negative compound growth except export of cardamom to U.S.S.R. during 1985-88.

From the above analysis it appears that exports to U.S.S.R., Japan and Singapore have done fairly well as compared to other countries during the period 1960 and 1988.

Conclusion:

From the foregoing pages it is concluded that world export and Guatemala's export of cardamom have increased considerably. While the export of cardamom from India, Sri Lanka and Tanzania has registered an alarming decline over the years under review. So far as the annual average compound growth rates in export of cardamom are concerned, they were much higher in case of Guatemala as compared to the world. The share of India in world export of cardamom has also decreased (i.e. from 74 percent to 2.9 percent in terms of quantity and 87.5 percent to 12.6 percent in terms of value) during 1960 and 1987. Whereas the share of Guatemala has risen significantly (i.e.by 70 percent in terms of quantity & 74.9percent in terms of value) during the

same period. This indicates that the competition in export of cardamom is mainly from Guatemala as it has been offering cardamom in the international market at lower prices than India. A few decades ago India was exporting more cardamom than Guatemala. However, the prevalence of drought conditions in India together with incidence of katte, disease resulted into substantial decline in Indian cardamom production. As a result, India lost its top place. Apart from this, the production boom in Guatemala which has been prevailing during the last few years brought downward pressure in international price.

It has also brought out that there has been wide fluctuations in export of cardamom(volume) from India during 1960-61 to 1988-89. However, the value realised from exports of cardamom has increased despite the fact that total volume of cardamom export has declined during the same period. It has also come to light that the relative share of cardamom in total spices export earnings has declined (i.e. from 22.6 percent to 3.6 percent). Similarly, the relative share of export to production of cardamom has also fallen (i.e. from 58.8 percent to 20 percent) during the same period. So far as the direction of cardamom export of India is concerned, it witnessed a considerable change during the period under review. During 1960-61 Saudi Arabia, Kuwait, Bahrain and Iran were

the major importers accounting for about 45 percent of the total India's export of cardamom, whereas during 1988-89 their share stood at only about 29 percent. Another noticeable change has been that during 1960-61 Japan and U.S.S.R. together accounted for only 5 percent of the total India's cardamom export, while during 1988-89 these two countries imported about 67 percent of the total India's export of cardamom. It means India has been loosing its major traditional markets such as Saudi Arabia, Kuwait, Bahrain, Iran, Qatar etc. It is, therefore, suggested that there should be an organised effort to increase exports in traditional markets alongwith new markets by exporting more and more at competitive prices. It can be done mainly by increasing total output and productivity and thus bringing down the cost of production.

Chapter - VII

EXPORT PERFORMANCE OF CHILLIES

Chapter-VII

EXPORT PERFORMANCE OF CHILLIES

Indian chillies are well known throughout the globe for their pungency and colour. They are one of the important cash crops and most widely cultivated item amongst the spices grown in India. Accordingly, India is the largest producer and major exporter of chillies in the world. Chillies occupy a place of eminence among all the spices exported from India. It comes next to pepper and cardamom in terms of export earnings. The bulk of the production is consumed within the country in view of strong domestic demand and a small volume of the production is exported. In 1988-89 chillies accounted for 4.2 percent of the total spices export earnings.

Chillies have become almost an essential article of diet of the rich and the poor alike. A proverb from Hungry maintains that "one man may earn for fame; another for wealth; but every one earns for chilli food."[1] Chillies are used for most of the traditional curries of India and form an important part in the composition of 'Plain Masala' - whole, ground into a paste or powdered as an essential item of Indian spice shelf. In west European and North American countries, culinary uses broadly account for one-third and industrial purposes account

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1. Spices Board, Cochin, Spices News Letter, July 1988; p-1

for about two-thirds of the total consumption of chillies.[1] The main culinary use of chilli powder is in Mexican dishes for which it has become increasingly popular in the U.S.A. It is also used in snack foods and sauces and by canners and processors in Mexican-type food products. There is also a small usage of the hottest chillies in pharmaceutical industry and in galenical remedies.[2]

Chillies of India, particularly the Sanam variety, are very much in demand and preferred in overseas markets because it is regarded as the best in quality as it has bright red colour and better pungency. Indian chillies are in demand because it contains good quantity of 'Capsicum content' also which are better utilised in extraction of oils and oleoresins in industrially developed countries. With this background the present chapter analyses the trends in world exports of dry chillies and the relative share of India and other major producing/exporting countries in the world. It also highlights the trends in India's exports of dry chillies, the trends in relative share of dry chillies in total spices export earnings, the trends in relative share of export to production of dry chillies and the trends in country-wise exports of dry chillies from India.

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1. Selected Markets for chillies and Paprika, Pub:, Tropical Products Institute, London, 1982, p-5.

2. Ibid

Trends In World Exports:

India has been the largest producer of chillies and was until the late 1960s the principal exporter. The main destination of these exports was Sri Lanka, which at one time imported more than 80 percent of India's exports. But in the early 1970s other countries also emerged as major exporters. As a consequence, Indian exports declined and its position as the principal exporting nation in chillies was overtaken by China and Pakistan. However, during 1980s India regained her lost position and became one of the major exporters of chillies in the world. Other major exporters of chillies are China, Pakistan, Spain, Thailand and Singapore. Another important supplier of chillies is Mexico particularly in respect of the U.S.A.

As a matter of fact, no precise analysis of world export in dry chillies can be done because several varieties of dry chillies including paprika and other capsicum varieties are also included in general statistics. However, it is seen that during the decade of the eighties average annual export of dry chillies and paprika by major spices exporting countries is around 125.0 thousand tonnes per annum (Table-1).

Table 1 shows the trends in world exports and the exports of dry chillies from major exporting countries from 1960 to 1988.

Table -1

Trends In Export of Chillies*(quantity) From Selected Countries during 1960 and 1988

: = ('000 tonnes)

Year	World	India	China	Pakistan	Thailand
1960	37.9	6.1	3.4+	N.A.	5.3
1965	52.1	6.9	7.3+	0.2	1.6
1970	58.2	3.8	7.0	7.3	1.7
1975	55.8	3.5	11.0+	N.A.	1.5
1980	90.7	8.0	14.5+	13.8	0.1
1985	139.2	1.5	40.6	11.2	1.0
1986	110.7	4.4	31.2	9.5	0.8
1987	131.5	5.0	35.9	5.8	0.6
1988	166.6	4.0	48.1+	14.1	1.4
% increase/ decrease over 1960	339.6	-34.4	1314.7	6950.0	-81.1

*Includes pimento, capsicum, cayenne, paprika and red pepper
+refers to FAO estimates
Source: 1. F.A.O. Trade year Book (Various issues)
2. Directorate of Cocoa, Arecanut and Spices Development, Calicut.

If we throw a glance at table 1 it appears that world export of dry chillies recorded an overall increase of 4.4 times between 1960 and 1988. While total exports of chillies from India witnessed an overall decrease of less than 1.0 time during the same period. Total exports of chillies from China recorded an overall rise of more than 14.0 times. Similarly, total exports of chillies from Pakistan registered a very high figure of 70.0 times during 1965 and 1988. Whereas total exports of chillies from Thailand registered an overall decline of less than 1.0 time during the period under review. It means that the rate of increase in exports of chillies (quantity) from Pakistan is much higher than the rate of rise in exports of chillies from China and the world. However, during the same period exports of chillies from India and Thailand recorded negative growth rates. Table 2 shows the trends in exports of chillies from major exporting countries (value) between 1960 and 1988.

It is evident from table 2 that total value of world export of chillies witnessed an overall rise of 9.5 times between 1960 and 1988. Whereas total value of chillies exports from India recorded an overall increase of 1.8 times during the same period. Total value of chillies exports from China and Pakistan went up by 33.2 times and 45.0 times respectively. Contrary to this, total value of chillies exports from Thailand registered a decline of less than one time during the period

Table -2

Trends In Export of Chillies*(Value) From Selected Countries During 1960 and 1988

V = (US $ Million)

Year	World	India	China	Pakistan	Thailand
1960	19.1	2.8	1.3+	N.A.	1.5
1965	24.9	3.6	3.0+	N.A.	0.2
1970	25.5	1.3	N.A.	N.A.	0.7
1975	55.6	0.8	10.1+	0.3	Neg.
1980	96.0	5.0	11.4+	9.7	1.5
1985	136.6	6.6	32.9	8.7	0.9
1986	122.4	5.0	29.2	6.1	0.8
1987	135.0	5.3	26.9	4.7	1.0
1988	181.5	4.9	43.2+	13.5	1.2
% increase/ decrease over 1960	850-3	75.0	3223.0	4400.0[a]	-20.0

* Includes pimento, capsicum, cayenne, paprika and red pepper
a refers to increase over 1975
+ refers to F.A.O. estimates
Source: Same as table 1

under study. This clearly shows that the rate of growth in value of Pakistan's export is much higher than the rate of rise in value of China, India and World's chillies export. However, on comparison of the growth rates in value and volume of chillies exports from Pakistan, it is found that the growth rate in value of chillies exports was much lower than the growth rate in volume of chillies exports.

Table 3 indicates the trends in relative share of India, China, Pakistan and Thailand in world export of chillies (quantity & value) during 1960 to 1988.

It is seen from table 3 that the share of India and Thailand in world export of chillies (quantity) witnessed an overall decrease of 13.7 percent and 13.2 percent respectively during 1960 to 1988. Whereas the share of China and Pakistan recorded an increase of 19.9 percent and 8.1 percent respectively during the period under reference (Chart-1). The same situation is emerged in case of value also and as a result the share of China and Pakistan in world export of chillies increased by 17.0 percent and 6.2 percent respectively. While the share of India and Thailand went down by 12.0 percent and 7.1 percent respectively during the period under reference(Chart-2).

From the analysis of table 1,2 and 3 it has brought out that quantity exported of chillies from India has dwindled and

Table -3

Trends In Relative Snare of India, China, Pakistan and Thailand In World Export of Chillies (Q&V) During 1960 & 1988

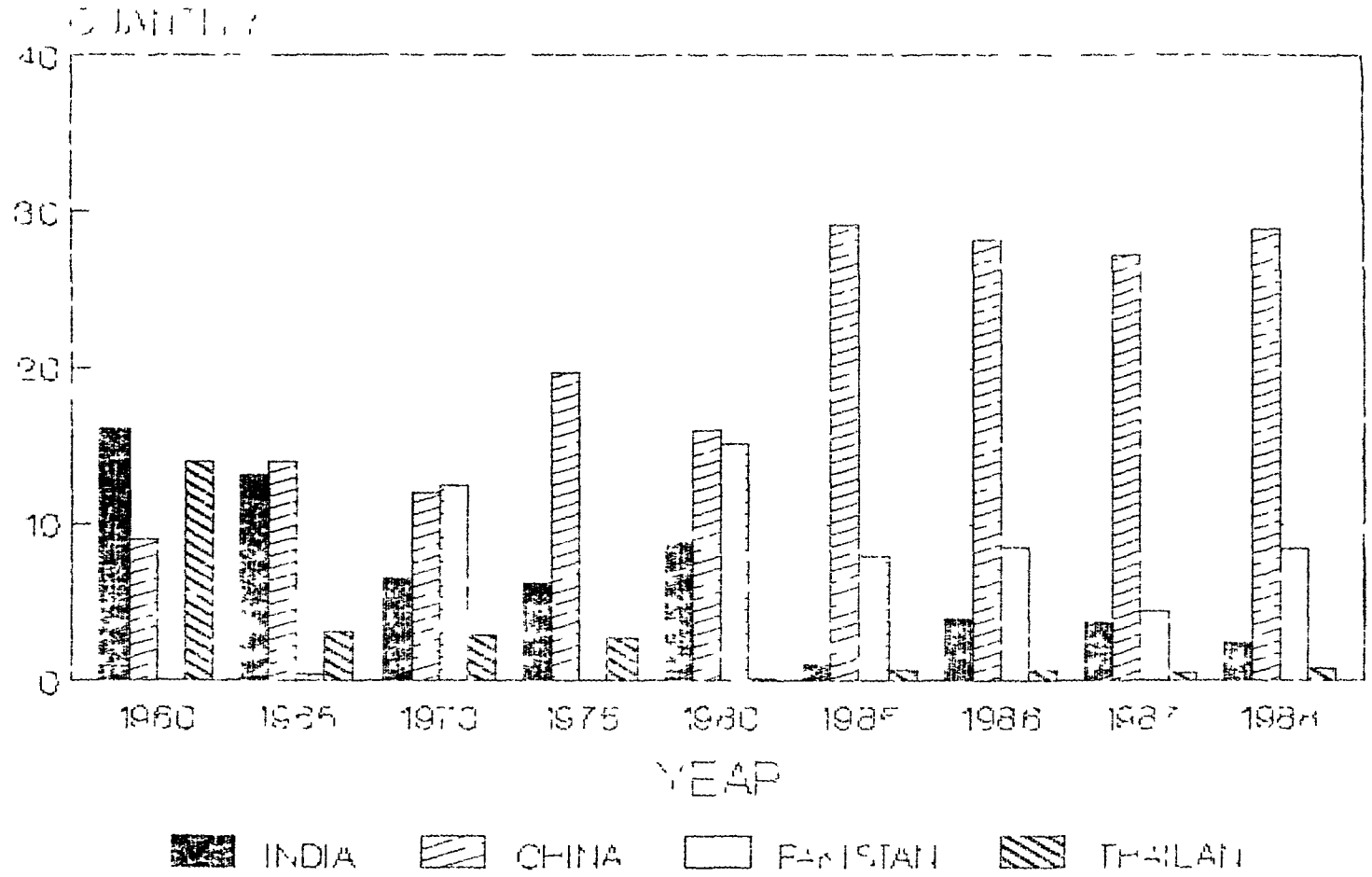
(in %)

Year	Volume				Value			
	India	China	Pakistan	Thailand	India	China	Pakistan	Thailand
1960	16.1	9.0	--	14.0	14.7	6.8	--	7.8
1965	13.2	14.0	0.4	3.1	14.5	12.0	--	0.8
1970	6.5	12.0	12.5	2.9	5.1	--	--	2.7
1975	6.3	19.7	--	2.7	1.4	18.2	0.5	--
1980	8.8	16.0	15.2	0.1	5.2	11.9	10.1	1.6
1985	1.1	29.2	8.0	0.7	4.8	24.0	6.4	0.7
1986	4.0	28.2	8.6	0.7	4.1	23.9	5.0	0.7
1987	3.8	27.3	4.4	0.5	3.9	19.9	3.5	0.7
1988	2.4	28.9	8.5	0.8	2.7	23.8	7.4	0.7

Source: Computed and compiled from Table 1 & 2

CHART - 1

RELATIVE SHARE OF INDIA,CHINA,PAKISTAN AND THAILAND(QUANTITY) IN WORLD EXPORT OF CHILLIES

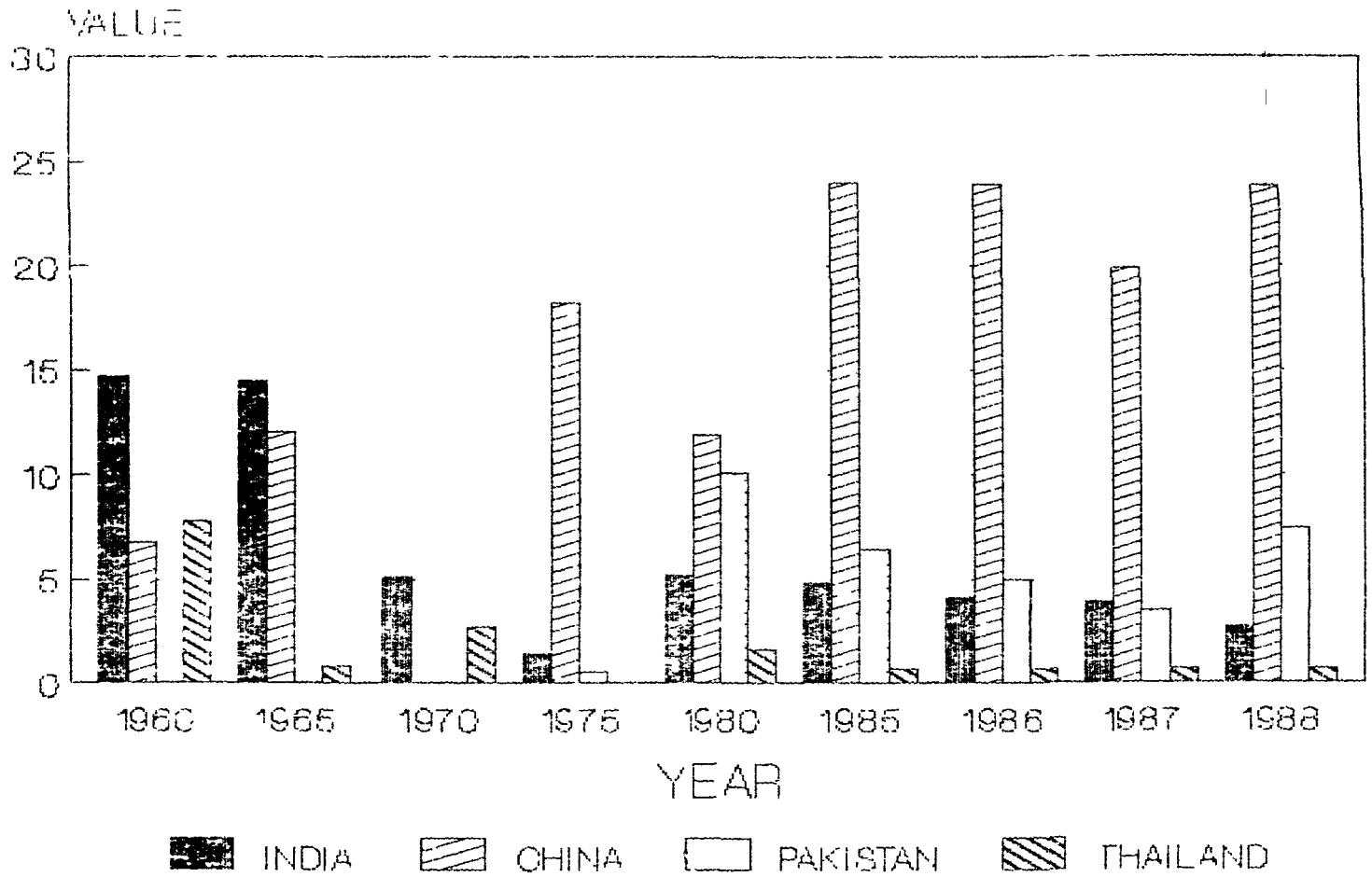


(IN %)

187A

CHART - 2

RELATIVE SHARE OF INDIA,CHINA,PAKISTAN AND THAILAND(VALUE) IN WORLD EXPORT OF CHILLIES



(IN $)

thus India has lost its share in world export of chillies in respect of both quantity and value during 1960 and 1988. Thus, all needs an immediate check.

Trends In Annual Average Compound Growth Rates:

Table 4 indicates the trends in annual average compound growth rates of world, India China and Thailand in regard to total volume of chillies export during 1960-65 to 1985-88.

From the table 4, it appears that during 1960-65 China has done exceedingly well and as a result the compound growth rate was fairly high as compared to world and India. However, Thailand's total volume of chillies export registered negative compound growth rate during the same period. During 1965-70 China and India, however, recorded negative compound growth rates, while Pakistan witnessed exceedingly high compound growth rate as compared to world and Thailand. Between 1970 and 1975 China was the only country whose exports witnessed positive compound growth rate. The period 1975 and 1980 was the best period for all major exporting nations except Thailand. However, India performed better as compared to China and Pakistan. The period 1980-85 was the worst period for India and Pakistan, while Thailand recorded much better compound growth rate as compared to China. During the period 1985-88 World, India, China, Pakistan and Thailand all recorded better compound growth

Table -4

Trends In Annual Average Compound Growth Rates of World, India, China and Thailand's Total volume of Chillies Export During 1960-65 to 1985-88

Year	World Annual Average Compound Growth Rates	India Annual Average Compound Growth Rates	China Annual Average Compound Growth Rates	Pakistan Annual Average Compound Growth Rates	Thailand Annual Average Compound Growth Rates
1960-65	6.6	2.5	16.5	-	-21.3
1965-70	2.2	-11.2	-0.8	105.3	1.2
1970-75	-0.8	-1.6	9.5	-	-2.5
1975-80	10.2	18.0	5.7	-	-41.8
1980-85	8.9	-28.0	22.9	-4.1	58.5
1985-88	6.2	38.7	5.8	8.0	11.9
1960-88	5.4	-1.5	9.9	20.3[a]	-4.6

a = indicates the growth rate between 1965 and 1988

Source: Computed and compiled from Table 1

rates. Moreover, India's growth rate was remarkable during this period. On the whole, Pakistan has done fiarly well as compared to China, world, India and Thailand as it has registered better compound growth rate during 1960 and 1988.

Table 5 shows the trends in annual average compound growth rates of world, India, China, Pakistan and Thailand's in respect of total value of chillies export between 1960-65 and 1985-88.

It is observed from table 5 that on the whole Pakistan has done fairly well as it has registered much better compound growth rate than world, India, China and Thailand's exports of chillies between 1960 and 1988. However, during 1980-85 exports of chillies from China recorded highest annual average compound growth rate followed by world and India's exports of chillies. The growth rate was negative in case of Pakistan and Thailand during the same period (Chart-3).

From the above analysis it has been clear that the overall performance of India has been unsatisfactory when we compare the performance of India with Pakistan and China.

Trends In India's Exports:

Table 6 shows the trends in export of dry chillies from India during 1960-61 to 1988-89.

It is evident from the table 6 that total quantity of dry chillies exported from India have gone down by less than one time between 1960-61 and 1988-89. However, total value rea-

Table -5

Trends In Annual Average Compound Growth Rates of World, India, China, Pakistan and Thailand's Total Value of Chillies Export Between 1960 and 1988

Year	World Annual Average Compound Growth Rates	India Annual Average Compound Growth Rates	China Annual Average Compound Growth Rates	Pakistan Annual Average Compound Growth Rates	Thailand Annual Average Compound Growth Rates
1960-65	5.4	5.2	18.2	-	-33.2
1965-70	0.5	-18.4	-	-	28.5
1970-75	16.9	-9.3	-	-	-
1975-80	11.5	44.3	2.5	100.4	-
1980-85	7.3	5.7	23.6	-2.5	-9.7
1985-88	9.9	-9.5	9.5	15.8	10.1
1960-88	8.4	2.0	13.3	34.0[a]	-0.8

a = indicates the growth rate between 1975 and 1988

Source: Computed and compiled from Table-2

CHART - 3

ANNUAL AVERAGE COMPOUND GROWTH RATES OF WORLD,INDIA,CHINA,PAKISTAN AND THAILAND'S TOTAL VALUE OF CHILLIES EXPORT

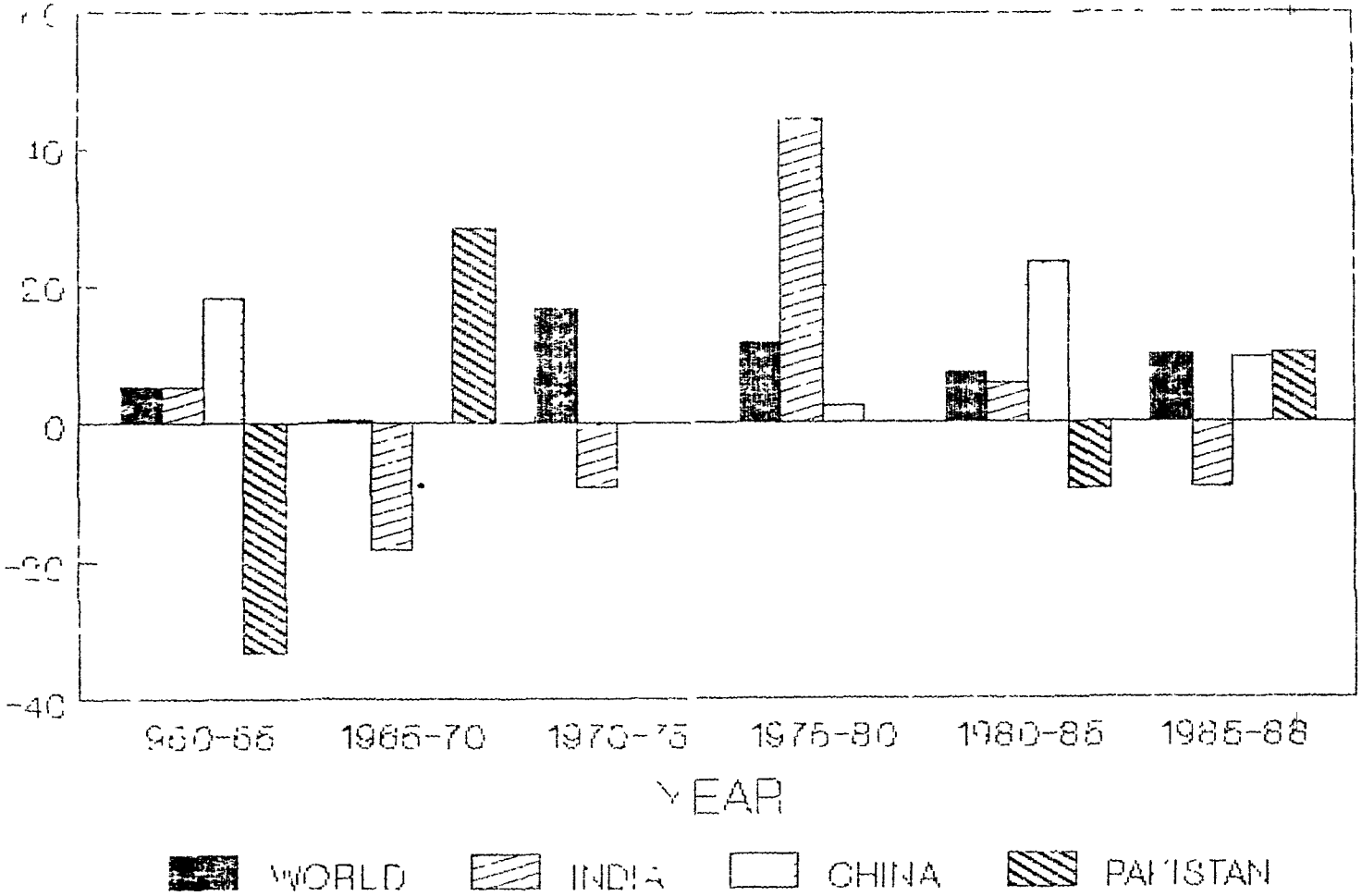


Table -6

Trends In Export of Dry Chillies (Quantity & Value) From India During 1960-61 To 1988-89

Q = ('000 tonnes)
V = (Rs. crores)

Year	Quantity Exported	Value Earned	Unit value (Rs. per kg.)
1960-61	8.4	1.8	2.14
1965-66	9.5	2.5	2.63
1970-71	2.1	1.0	4.76
1975-76	3.5	3.2	9.14
1980-81	7.7	5.6	7.27
1981-82	4.7	4.2	8.94
1982-83	12.9	12.3	9.53
1983-84	10.6	8.8	8.30
1984-85	8.2	9.7	11.83
1985-86	1.2	2.0	16.67
1986-87	4.3	4.9	11.40
1987-88	5.1	8.3	13.61
1988-89*	5.4	12.0	22.22
% increase/decrease over 1960-61	-35.7	566.7	938.3

* Provisional Figures

Source: Upto 1983-84-Directory of Exporters of Spices (1985) Published by Spices Export Promotion Council, Cochin
1984-85 to 1988-89-Customs Lists-Spices Board, Cochin.

lised from the exports of dry chillies has increased by nearly 7 times during the same period. This indicates that inspite of decrease in volume of chillies export, the value earned from exports of chillies has increased considerably. This sharp rise in value of exports may be ascribed to an unprecendented hike in prices of chillies in the world market. The unit value realisation has, thus, risen (i.e. from Rs. 2.14 to 22.22) by more than 10 times during the period under reference. According to the latest information, the export of chillies has gone up to 10.7 thousand tonnes valued at Rs. 20.1 crores during 1989-90.

From the table 6 it has been clear that the trends in volume, value and unit value of export have been fluctuating and price is the influencing factor in determining the level of export. Therefore, the prices are to be stabilised so that the export of chillies could be maximised.

Table 7 shows the trends in annual average compound growth rates in export of dry chillies (quantity, value and unit value) during 1960-65 and 1985-88.

It can be seen from the table 7 that on the whole unit value realisation from chillies export has done fairly well as compared to total volume of chillies exported and total value

Table -7

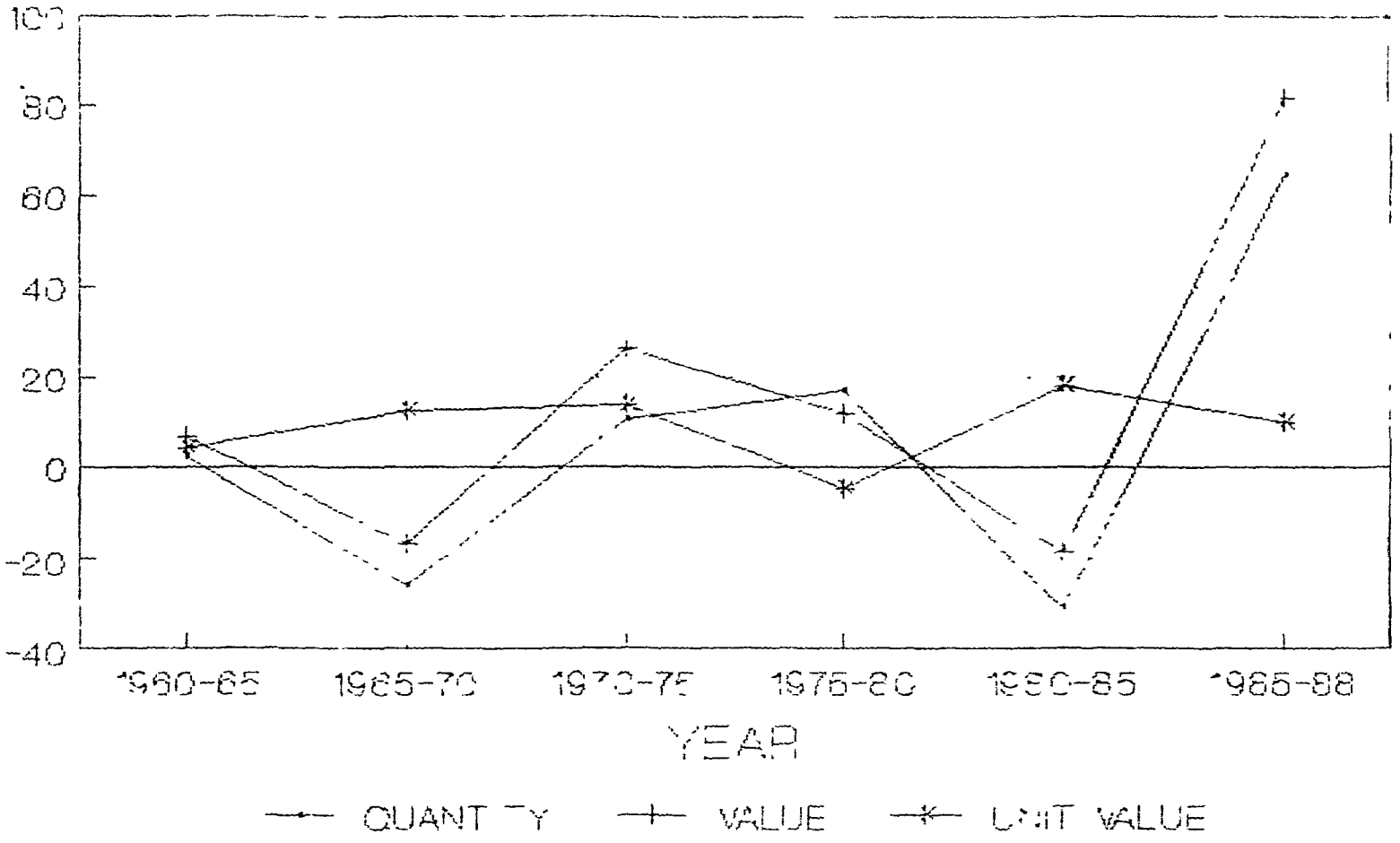
Trends In Annual Average Compound Growth Rates In Export of Dry Chillies (Quantity, Value and Unit Value) During 1960-65 To 1985-88

Year	Quantity Exported Annual Average Compound Growth : Rates	Value Earned Annual Average Compound Growth Rates	Unit value Annual Average Compound Growth Rates
1960-65	2.5	6.8	4.2
1965-70	-26.0	-16.7	12.6
1970-75	10.8	26.2	13.9
1975-80	17.0	11.8	-4.5
1980-85	-31.0	-18.6	18.0
1985-88	65.0	81.7	10.0
1960-88	-1.7	7.0	8.7

Source: Compiled and Computed From Table -6

CHART - 4

ANNUAL AVERAGE COMPOUND GROWTH RATE IN EXPORT OF CHILLIES FROM INDIA DURING 1960-65 TO 1985-88



(QUANTITY, VALUE UNIT VALUE)

earned between 1960 and 1988. However, on critical analysis of the quinquennial periods it is seen that total value realised from exports of chillies recorded fairly high compound growth rates as compared to total volume and unit value of chillies exports during 1960-65, 1970-75 and 1985-88(Chart-4).

From the table 7 it has brought out that annual average compound growth rates have been highly fluctuating in total volume, total value and unit value realisation from chillies export during the periods under review. However, the compound growth rates were steady in case of unit value realisation from chillies export as it witnessed positive compound growth rates throughout the period of study except during 1975-80.

Table 8 shows the trends in export earnings from spices, export earnings from dry chillies and the relative share of dry chillies in total export earnings from spices from 1960-61 to 1988-89.

Table 8 reveals that total export earnings from spices has increased by more than 17 times during 1960-61 to 1988-89. Similarly, the export earnings from dry chillies went up by nearly 7 times during the same period. It means that the rate of growth in export earnings from spices is much more than the

Table -8

Trends in Relative Share of Dry Chillies in Total Spices Export Earnings During 1960-61 To 1988-89

V = (Rs. crores)

Year	Export Earnings From Spices	Export Earnings From Dry Chillies	% share in Total
1960-61	16.4	1.8	11.0
1965-66	23.0	2.5	10.9
1970-71	38.8	1.0	2.6
1975-76	72.7	3.2	4.8
1980-81	117.0	5.6	6.6
1981-82	92.3	4.2	4.6
1982-83	92.4	12.3	13.3
1983-84	111.7	8.8	7.9
1984-85	209.0	9.7	4.6
1985-86	282.5	2.0	0.7
1986-87	281.9	4.9	1.7
1987-88	298.0	8.3	2.8
1988-89*	262.7	12.0	4.2
% Increase/ decrease over 1960-61	1623.8	566.7	-6.8

* Provisional figures
Source: Spices Board, Cochin.

rate of growth in export earnings from dry chillies. This implies that the export of chillies has not done well as compared to other spices namely pepper and turmeric. Consequently, the share of dry chillies in total export earnings from spices has gone down considerably (i.e. from 11.0 percent to 4.2 percent)i.e. by 6.8 percent during the same period. During 1989-90 the share of chillies in total spices export earnings has improved appreciably i.e. from 4.3 percent to 7.3 percent.

Table 9 shows the trends in annual average compound growth rates in export earnings from spices and export earnings from dry chillies between 1960-65 and 1985-88.

Table 9 reveals that except during 1975-80 and 1985-88 the annual average compound growth rates were high in case of earnings from exports of spices as compared to the earnings from exports of dry chillies during the entire period of 1960 and 1988. However, it is also seen that during 1975-80 the compound growth rate in earnings from exports of spices was slightly lower than the growth rate in earnings from exports of chillies. On the whole, exports of spices have done well as it has recorded positive compound growth rates throughout the period of study except during 1985-88.

Table -9

Trends In Annual Average Compound Growth Rates In Export Earnings From Spices And Earnings From Exports of Dry Chillies During 1960-65 To 1985-88

Year	Earnings from Exports of Spices Annual Average Compound Growth Rates	Earnings from Exports of Dry Chillies Annual Average Compound Growth Rates
1960-65	7.0	6.8
1965-70	11.0	2.3
1970-75	13.4	-16.7
1975-80	10.0	11.8
1980-85	19.3	-18.6
1985-88	Neg.	81.7
1960-88	10.7	7.0

Source: Compiled and Computed From Table -8

Trends In Share of Export To Production of Chillies:

Table 10 is an indicative of the trends in production, export and relative share of export to total production of chillies from 1960-61 to 1988-89.

Data set out in table 10 reveals that toal production of chillies has recorded an overall increase of more than one and a half time (1.5 times) during 1960-61 to 1988-89. However, total export of chillies has witnessed an overall decline of less than one time during the same period. As a result, the relative share of chillies export to total production came down by 1.1 percent during the period under reference (Chart-5).This has been attributed to the sharp increase in the domestic consumption of chillies.

From the table 10 it is clear that the growth in production of chillies is very insignificant, while the export of chillies have shown negative growth rate. It is also clear from the table that a small percentage of total chillies production is left for export. One of the major reasons is that output of chillies has not increased as much as the population has increased and thus increased domestic requirements do not allow sufficient surpluses for export.

Table -10

Trends In Percentage Share of Export To Production Of Dry Chillies From 1960-61 to 1988-89

Q = ('000 tonnes)

Year	Production	Export	% share of Export to Production
1960-61	419.0	8.4	2.0
1965-66	364.0	9.5	2.6
1970-71	520.4	2.1	0.4
1975-76	536.1	3.5	0.7
1980-81	509.1	7.7	1.5
1981-82	514.7	4.7	0.9
1982-83	538.9	12.9	2.4
1983-84	566.5	10.6	1.9
1984-85	630.5	8.2	1.3
1985-86	877.4	1.2	0.1
1986-87	780.0	4.3	0.6
1987-88	574.6	6.1	1.0
1988-89	609.0	5.4	0.9
% Increase or decrease over 1960-61	45.3	-35.7	-1.1

Source: Production-Directorate of Economics and Statistics, New Delhi.
Export: Same as Table-6

Table -11

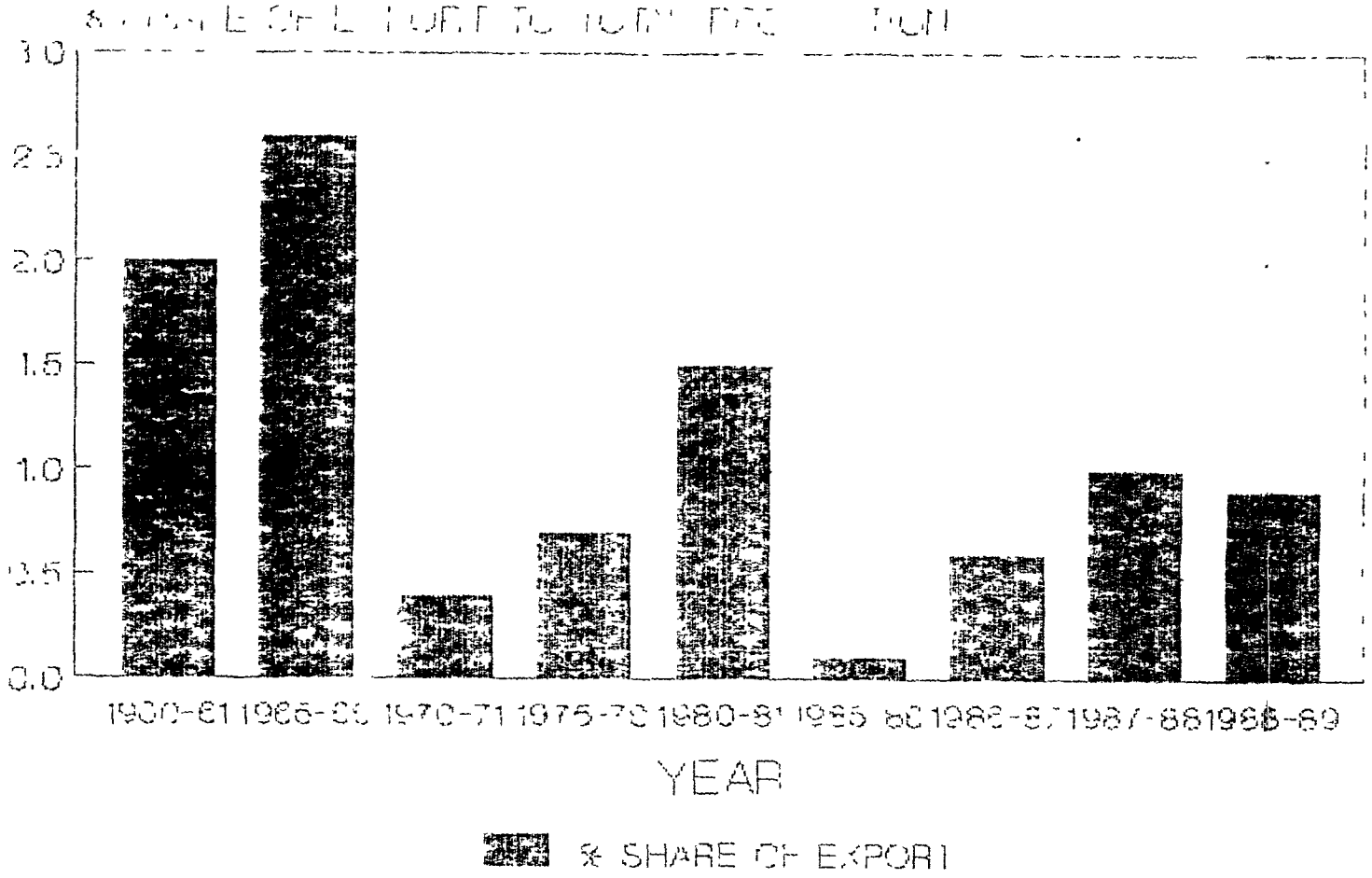
Trends In Annual Average Compound Growth Rates In Export and Production of Dry Chillies During 1960-65 to 1985-88

Year	Production Annual Average Compound Growth Rates	Export Annual Average Compound Growth Rates
1960-65	-2.8	2.5
1965-70	7.4	-26.0
1970-75	0.6	10.8
1975-80	-1.0	17.0
1980-85	11.5	-31.0
1985-88	-11.5	65.0
1960-88	1.3	-1.7

Source: Computed and Compiled From Table-10

CHART - 5

RELATIVE SHARE OF EXPORT TO TOTAL PRODUCTION OF CHILLIES FROM 1960-61 TO 1988-89



(IN %)

200A

Trends In Annual Average Compound Growth Rates:

It is apparent from the table 11 that total production of dry chillies has recorded better annual average compound growth rate as compared to the rate registered in total export of dry chillies between 1960 and 1988 despite the fact that total export of dry chillies has witnessed much better compound growth rates during 1970-75 and 1975-80. It is also pertinent to note here that during the period 1980-85 the total production of dry chillies witnessed highest annual average growth rate, while total export of dry chillies registered higher negative compound growth rate. During the period 1985-88 trend became the reverse and thus total export of dry chillies recorded highest compound growth rate, whereas total production of dry chillies witnessed higher negative compound growth rate.

This all shows that the trends in annual average compound growth rate in total production and total export of chillies have been erratic during the period under study. However, total production of dry chillies has done well as it has registered relatively better compound growth rate between 1960 and 1988.

Direction of Chillies Exports:

Indian chillies are exported to various countries of the world. The major destinations of these exports are U.S.A.,

Sri Lanka, U.K., U.S.S.R., U.A.E., Canada, Saudi Arabia, Netherlands, Singapore, Israel, Japan and West Germany. In 1988-89 U.S.A. and Sri Lanka together accounted for more than 76 percent of the total India's chillies export. The offtake of U.S.S.R. was 3 percent of the total Indian chillies exports followed by U.A.E. 2.4 percent, U.K. 2.3 percent, Netherlands 1.5 percent, Canada 0.9 percent, Saudi Arabia 0.7 percent, Japan and West Germany 0.4 percent each, Singapore and Israel 0.2 percent each during the same period.

Table 12 shows the country-wise exports of chillies from India during 1960-61 to 1988-89.

Table 12 reveals that total export of dry chillies from India to U.S.A. has increased by nearly 14 times between 1970-71 and 1988-89. Total export of Indian chillies to Sri Lanka (it was at one time the largest importer of Indian chillies) has declined by less than 1 time in 1988-89 over 1960-61. Total export of dry chillies from India to U.K. has risen by more than 9 times during 1965-66 to 1988-89. However, the exports of Indian chillies to U.S.S.R. recorded an overall decline of less than time in 1988-89 over 1970-71. Unlike the U.S.S.R., total export of Indian chillies to Netherlands went up by nearly 5 times between 1980-81 and 1988-89. Similarly, the exports of chillies

Table -12

Trends In Country-wise Export of Chillies From India During 1960-61 To 1988-89

Q = (M. Ton)

Country	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89*	% increase or decrease over 1960-61
U.S.A.	-	Neg	155.0 (7.5)	1274.0 (36.0)	961.0 (12.6)	279.0 (22.5)	1570.0 (16.3)	1632.0 (26.7)	2134.0 (39.4)	1276.8
Sri Lanka	6229.0 (74.5)	9343.0 (98.0)	1481.0 (71.4)	-	1464.0 (19.2)	-	1094.0 (25.3)	2291.0 (37.4)	2001.0 (36.9)	-67.9
U.K.	-	14.0 (0.1)	5.0 (0.2)	3.0 (Neg)	12.0 (0.2)	26.0 (2.1)	266.0 (6.1)	536.0 (8.8)	127.0 (2.3)	807.1
U.S.S.R.	-	-	200.0 (9.6)	400.0 (11.3)	370.0 (4.8)	324.0 (26.1)	80.0 (1.8)	70.0 (1.1)	162.0 (3.0)	-19.0
Netherlands	-	-	-	-	17.0 (0.2)	17.0 (1.4)	36.0 (0.8)	97.0 (1.6)	80.0 (1.5)	370.0
Canada	-	-	10.0 (0.5)	9.0 (0.3)	57.0 (0.7)	30.0 (2.4)	44.0 (1.0)	143.0 (2.3)	50.0 (0.9)	400.0
Singapore	5.0 (Neg)	-	-	1211.0 (34.3)	619.0 (8.1)	16.0 (1.3)	85.0 (2.0)	39.0 (0.6)	9.0 (0.2)	80.0
SaudiArabia	4.0 (Neg)	0.6 (Neg)	3.0 (0.1)	6.5 (0.2)	(20.0) (0.3)	41.0 (3.3)	57.0 (1.3)	182.0 (3.0)	38.0 (0.7)	850.0
Israel	-	-	-	-	7.0 (0.4)	12.0 (1.0)	91.0 (2.1)	51.0 (0.8)	12.0 (0.2)	71.4
Japan	-	-	Neg.	1.0 (Neg)	73.0 (1.0)	-	302.0 (7.0)	24.0 (0.4)	19.0 (0.4)	1800.0
W. Germany	-	-	Neg.	2.0 (Neg)	2.0 (Neg)	140.0 (11.3)	13.0 (0.3)	56.0 (0.9)	20.0 (0.4)	900.0
U.A.E.	-	-	Neg.	34.0 (1.0)	16.0 (0.2)	10.0 (0.8)	122.0 (2.8)	262.0 (4.3)	132.0 (2.4)	288.2
Others	2126.0 (25.4)	174.4 (1.8)	199.0 (9.6)	591.0 (16.7)	4012.0 (52.6)	346.0 (27.9)	567.0 (13.1)	739.0 (12.0)	640.0 (11.8)	-69.9
Total	8364.0	9532.0	2073.0	3532.0	7630.0	1242.0	4327.0	6122.0	5424.0	-35.1

*Provisional Figures, Figures in bracket are the percentages
Source: Upto 1980-81; D.G.C.I & S Calcutta
1985-86 and onwards; Spices Board, Cochin.

to Canada went up and registered an overall rise of 5 times during 1970-71 to 1988-89. Total export of Indian chillies to Singapore has gone up by nearly 2 times in 1988-89 over 1960-61. Total export of chillies to Saudi Arabia also rose by nearly 10 times between 1960-61 and 1988-89. Total export of chillies to Israel recorded an increase of nearly 2 times during the periods 1980-81 to 1988-89. Likewise total export of chillies from India to Japan, West Germany and U.A.E. have registered an overall increase of 19 times, 10 times, and nearly 4 times respectively between 1975-76 and 1988-89.

From the above discussion it has emerged that during the period 1960-61 to 1988-89 exports of dry chillies to all the selected markets have increased except Sri Lanka and U.S.S.R. However, the annual average growth rate in quantum of exports to Japan was highest (138.5 percent) followed by U.S.A. (70.9 percent), West Germany (69.2 percent), Netherlands (46.3 percent), U.K. (35.1 percent), Saudi Arabia (30.4 percent), U.A.E. (22.2 percent), Canada (22.2 percent), Israel (8.9 percent) and Singapore (2.9 percent). Similarly, on evaluation of the relative shares of these selected countries in total India's exports of dry chillies, it is seen that the share of U.S.A. has increased by 31.9 percent followed by U.K. 2.2 percent,

U.A.E. 1.4 percent, Netherlands and Saudi Arabia 0.7 percent each, Canada, Japan and West Germany 0.4 percent each, Singapore 0.2 percent and Israel 0.1 percent. At the same time, Sri Lanka and U.S.S.R. have lost their shares in total Indian chillies exports by 37.6 percent and 6.6 percent respectively during the same period.

Trends In Annual Average Compound Growth Rates:

Table 13 shows the trends in annual average compound growth rates in country-wise exports of dry chillies (quantity) from India during 1960-65 to 1985-1988.[1]

It is evident from table 13 that during 1960-65 exports to Sri Lanka has witnessed positive compound growth rate, whereas the growth rate was negative in case of exports to Saudi Arabia. Between 1965 and 1970 exports to Saudi Arabia, however, recorded fairly high compound growth rate, while exports to Sri Lanka and U.K. registered negative compound growth rates. During the periods 1970-75 the annual average compound growth rate was highest in case of exports to U.S.A. followed by Saudi Arabia and U.S.S.R. However, exports to U.K. and Canada have shown negative annual average compound growth rates during the same period. In the years 1975-80 Japan has recorded exceedingly

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1. The growth rate has not been worked out for some of the years due to non-availability of data.

Table -13

Trends In Annual Average Compound Growth Rates In Country-wise Exports of Dry Chillies From India During 1960-65 to 1985-88

Country	1960-65	1965-70	1970-75	1975-80	1980-85	1985-88	1960-88
U.S.A.	-	-	52.4	-5.5	-21.9	97.0	-
Sri Lanka	8.4	-30.8	-	-	-	-	-4.0
U.K.	-	-18.6	-9.7	-31.9	-16.7	69.7	-
U.S.S.R.	-	-	14.0	-1.5	-2.6	-20.6	-
Netherlands	-	-	-	-	Nil	67.6	-
Canada	-	-	-2.1	-44.7	-12.0	18.6	-
Singapore	-	-	-	-12.6	-51.9	-17.5	2.1
Saudi Arabia	-31.6	38.0	16.7	25.2	15.4	-2.5	8.3
Israel	-	-	-	-	11.4	Nil	-
Japan	-	-	-	135.9	-	-	-
West Germany	-	-	-	Nil	133.9	-47.7	-
U.A.E.	-	-	-	-14.0	-9.0	136.3	-
Otners	-39.4	2.7	24.3	46.6	-38.7	22.8	-4.2
Total	2.5	-26.0	10.3	17.0	-31.0	65.0	-1.5

Source: Compiled and Computed From Table 12

well compound growth rate as compared to the growth rate registered in exports to Canada, U.K. and Saudi Arabia. The growth rate was negative in case of exports to U.A.E., Singapore, U.S.A. and U.S.S.R. Between 1980 and 1985 exports to West Germany has registered much better compound growth rate in comparison to exports to Sri Lanka, Saudi Arabia and Israel. The growth rate was nil in case of Netherlands, while exports to Singapore, U.S.A., Canada, U.A.E., and U.S.S.R. witnessed negative annual average compound growth rate. During the periods 1985-88 exports to U.A.E. has shown much higher compound growth rate as compared to the growth rates recorded by exports to U.S.A., U.K., Netherlands and Canada. The growth rate was negative in exports to West Germany, U.S.S.R., Singapore and Saudi Arabia, while exports to Israel registered nil growth rate during the same period. On the whole (between 1960 and 1988) exports to Saudi Arabia have done fairly well as compared to exports to any other country which are under study.

From the above analysis it has been observed that the trends in annual average compound growth rate in exports of dry chillies to different selected markets have been highly faltering. U.K. is the only country which has registered continuous positive growth rates after 1970-75. Saudi Arabia is the next market to which the exports of chillies from India showed somewhat better growth rates during the period under study.

Conclusion:

From the foregoing discussion it has emerged that world export of chillies has increased alongwith the export of Pakistan, China and India. However, the quantity of chillies exported from India has decreased during the period under review. The export of chillies from Thailand has declined both in terms of quantity and value. So far as the growth rates in export of chillies are concerned, they were much higher in case of Pakistan as compared to India, world and China. The share of India in world export of chillies has also come down alarmingly (i.e. from 16.1 percent to 2.4 percent in terms of quantity and 14.7 percent to 2.7 percent in terms of value). Whereas the share of Pakistan and China has increased considerably during the same period. This shows that the competition in export of chillies from India is mainly from China and Pakistan as they have been offering chillies at cheaper rates.

It has also been observed that the trends in exports of chillies from India have been highly fluctuating. However, the value realised from exports of chillies has increased despite the decline in quantity exported between the period 1960-61 and 1988-89. It has also brought out that the share of chillies in total spices export earnings has declined. Similarly, the relative share of export to production of chillies has also

gone down. So far as the direction of chillies exports of India is concerned, it showed a significant change in import pattern of various countries during the years under review. In the 1960s there were few countries importing chillies from India. Sri Lanka was the largest importer of Indian chillies accounting for nearly 90 percent of the total India's chillies export. However, in the decade of the 1980s the offtake of Indian chillies by Sri Lanka has dwindled and thus it has been importing only about 29 percent of the total exports of chillies from India. Another major diversification which took place has been that U.S.A. and U.K. together accounted less than 1.0 percent of the total India's exports of chillies in the 1960s, while in the 1980s these two countries have been importing nearly 31 percent of the total Indian chillies exports.

Chapter - VIII

EXPORT PERFORMANCE OF GINGER

Chapter -VIII

EXPORT PERFORMANCE OF GINGER

Indian ginger has been famous all over the world from the times immemorial. India is the largest producer of ginger accounting for more than 50 percent[1] of the global output. It is also one of the major exporters of ginger in the world. As ginger is the major spice of India, it often ranks fourth among all the spices exported from India. The export of ginger varies from year to year depending upon production and consequently surplus stock because a major part of production is consumed within the country. However, after meeting domestic requirements, substantial quantities are exported and thus, ginger export earnings ranging between 2 and 11 percent of the total spices export earnings.

Ginger is mainly used as a spice for cookery, as a flavouring agent in a wide variety of food. In our country dry ginger is also used in the manufacture of several by-products, such as ginger oil, ginger essence, ginger oleoresin etc. Powdered dry ginger forms an important component in curry powder. In U.K., it is used in making home-brewed ginger beer. In Saudi Arabia and Yemen, this spice is predominantly used for flavouring coffee and culinary preparations. While ginger in Western European countries, U.S.A. and Canada is utilised in the food and flavour industry.

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1. Spices Board, Cochin, Spices News Letter, March, 1988, p-11

Indian ginger is very much in demand in foreign countries because it is considered to be the best in quality which contains less fibre. It is renowned for its characteristics such as aroma and pungency. Indian ginger is preferred due to good grades for the extraction of oils and oleoresins. With this background the present chapter analyses the trends in world export of ginger and export of ginger from major exporting countries. It further examines the trends in India's export of ginger, trends in relative share of ginger in total spices export earnings, trends in relative share of export to production of ginger and trends in country-wise export of ginger from India.

Trends In World Exports:

During the early part of the 1950s the major supplier of dried ginger to the world markets were India, Jamaica and Sierra Leone. Nigeria was also exporting relatively small quantities. However, during later part of the 1950s a significant change in the pattern of supply took place. India and Nigeria's exports noticeably increased while exports from Jamaica and Sierra Leone recorded declining trends. During the period 1960 and 1968 India was largest exporter and Nigeria had second place. From 1968 to 1970 India recorded poor crops and accordingly Nigerian exports increased substantially and became the biggest exporter in the world. However, in the seventees India improved its exports considerably and as a result it dominated

world trade.[1] The sharp annual fluctuations in supply from the major exporting countries and increasing consumption of ginger gave an impetus to the production and export of ginger in the world. Consequently, Taiwan, Indonesia and Malaysia (W) emerged as major ginger producers and exporters. Thus, due to the emergence of the said nations India lost its dominating position in respect of ginger exports in the world in recent years. Taiwan, being a major ginger producer has been offering ginger at lower prices in international market than India. As a result, India's major importers of ginger such as United States has started importing from Taiwan. Though, Chinese pealed ginger is of good quality, it lacks in pungency. The Indian ginger is far superior in quality because it is less fibrous and is most suitable for extraction of oils and oleoresins. Similarly, ginger produced by Sierra Leone and Jamaica in particular is also considered to be of high quality on account of the superior flavour and clean appearance. However, the supply of ginger from Jamaica and Sierra Leone is not significant as compared to Taiwan and India. Therefore, the main competitor of India is Taiwan. Table 1 shows the trends in world export of dry ginger (quantity) and export of ginger from India, Taiwan, Jamaica and Sierra Leone between 1960 and 1987.

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1. Tropical Products Institute, London." Selected Markets for Ginger and its derivatives with special reference to dried ginger", July, 1982; p-23

Table -1

Trends In World Export of Dry Ginger (Quantity) and Export of Ginger From Major Exporting Countries During 1960 and 1987

Q = ('000 tonnes)

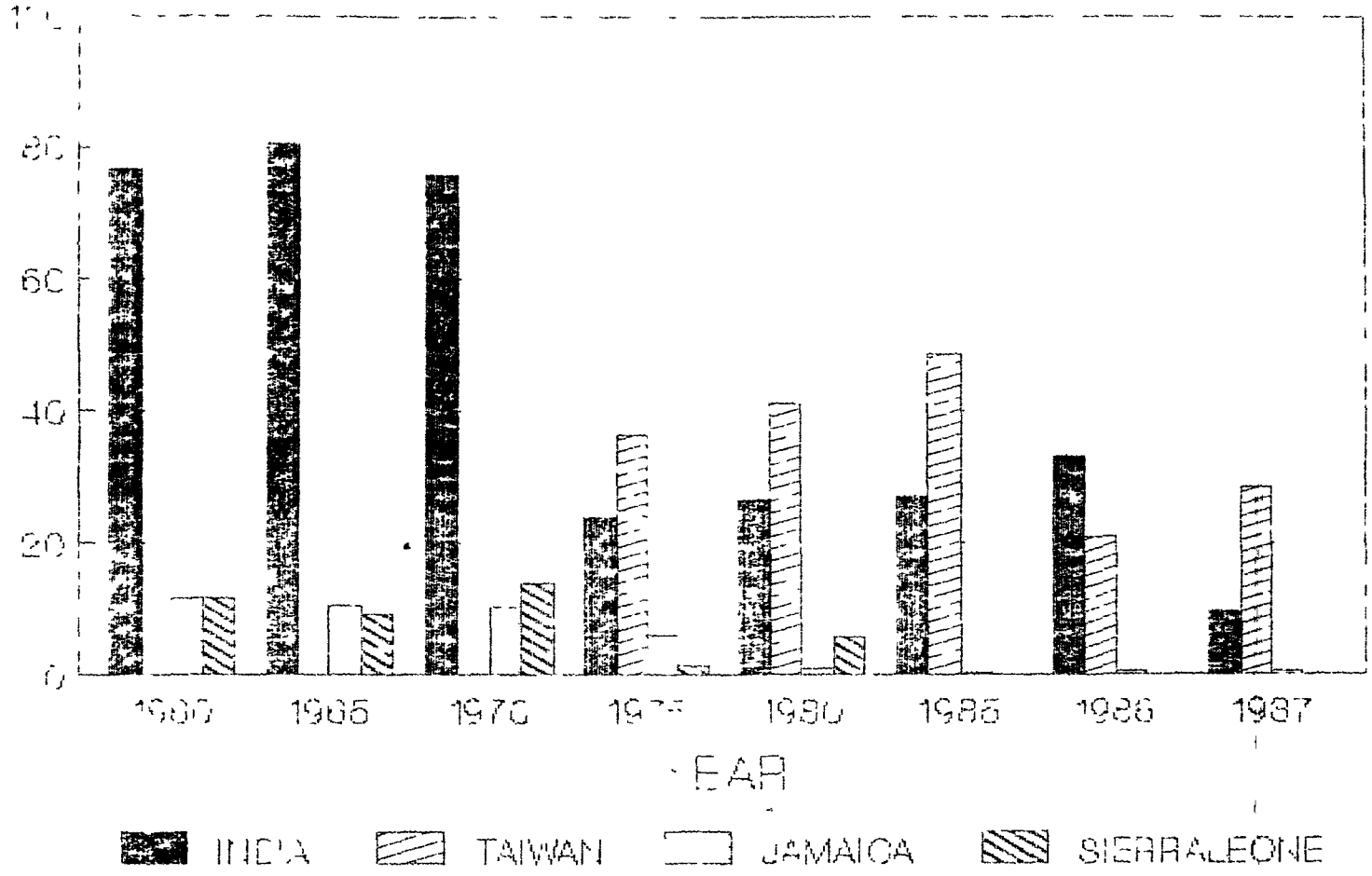
Year	World*	India	Taiwan	Jamaica	Sierra Leone
1960	7.7	5.9 (76.6)	N.A.	0.9 (11.7)	0.9 (11.7)
1965	6.7	5.4 (80.6)	N.A.	0.7 (10.4)	0.6 (9.0)
1970	2.9	2.2 (75.9)	N.A.	0.3 (10.3)	0.4 (13.8)
1975	15.4	3.7 (24.0)	5.6 (36.4)	0.9 (5.8)	0.2 (1.3)
1980	26.2	7.0 (26.7)	10.8 (41.2)	0.2 (0.8)	1.5 (5.7)
1985	28.9	7.8 (27.0)	14.1 (48.8)	0.1 (0.3)	Neg.
1986	20.1	6.7 (33.3)	4.2 (20.9)	0.1 (0.5)	N.A.
1987	27.0	2.6 (9.6)	7.7 (28.5)	0.1 (0.4)	N.A.
% Increase or decrease over 1960	250.6	-55.9	37.5[a]	-88.9	-88.9

*It is the sum of major exporting countries, a = indicates increase over 1975. Figures in bracket are the percentages. Data of 1988 are not available.

Source: 1. Tropical Development And Research Institute, London (U.K.)
2. Directorate of Cocoa, Arecanut & Spices Development, Calicut.

CHART - 1

RELATIVE SHARE OF INDIA, TAIWAN, JAMAICA & SIERRA LEONE IN WORLD EXPORT OF GINGER BETWEEN 1960 AND 1987



(QUANTITY)

It is evident from the table 1 that world export of dry ginger has recorded an overall increase of nearly 4 times between 1960 and 1987. While total export of ginger from India has shown an overall decrease of less than 1.0 time during the same period. But total export of ginger from Taiwan has witnessed an overall rise of 1.4 times between 1975 and 1987.[1] Total export of dry ginger from Jamaica and Sierra Leone has registered an overall decline of less than 1.0 time each during 1960 and 1987 and 1960 to 1984 respectively.[2]

On examination of the trends in the relative share of India, Taiwan, Jamaica and Sierra Leone in world export of dry ginger, it is seen that the shares of all the four countries have declined during the period under reference. However, it is pertinent to note here that the share of Taiwan has not declined as much as the share of India has decreased (Chart-1)

Trends in Annual Average Compound Growth Rates:

Table 2 indicates the annual average compound growth rates of world, India, Taiwan, Jamaica and Sierra Leone's total volume of ginger exports during 1960-65 to 1985-87.

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1. Taiwan emerged as an exporter in the mid of seventees.
2. Data in regard to exports from Sierra Leone is not available after 1984.

Table -2

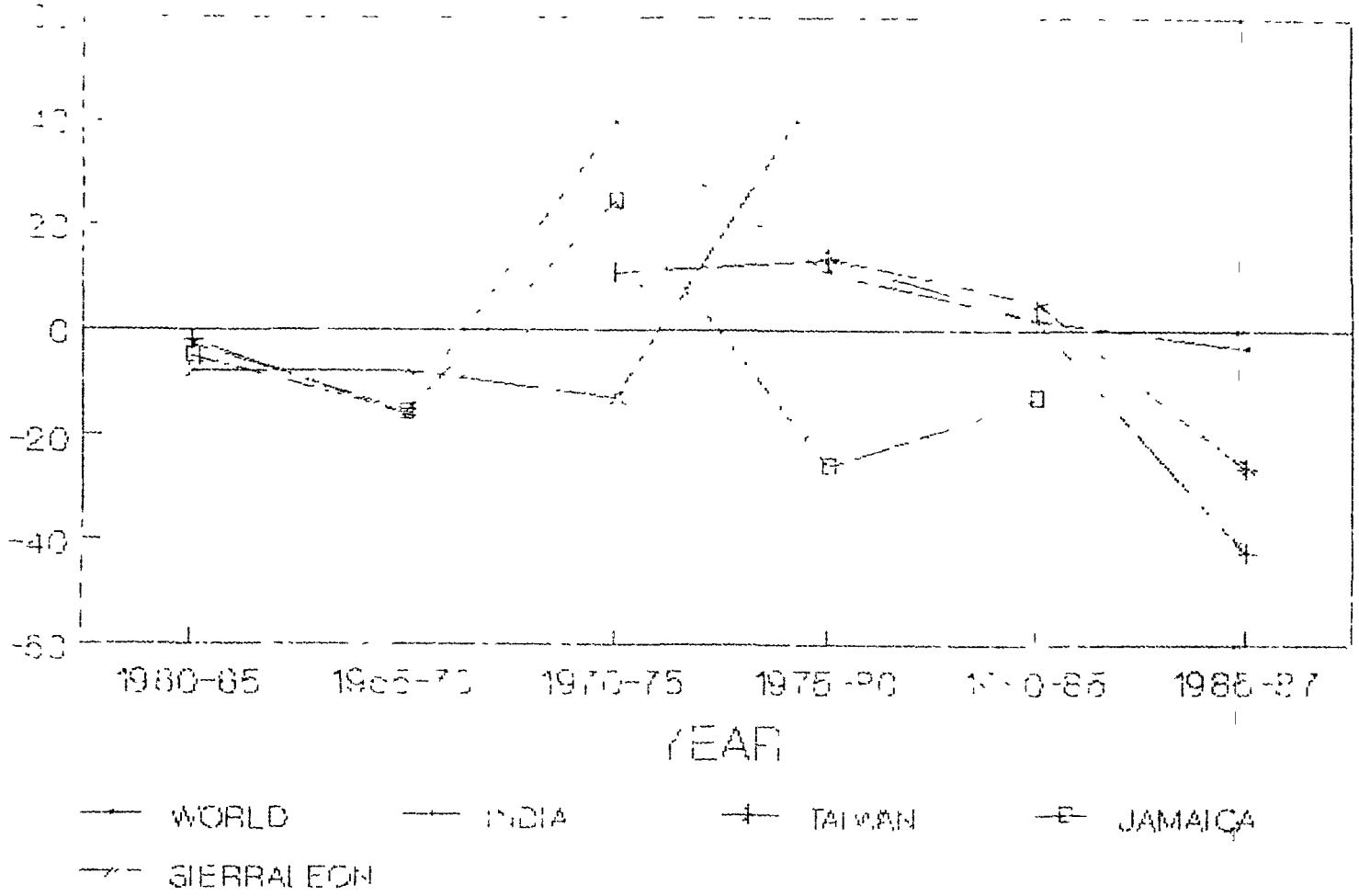
Trends In Annual Average Compound Growth Rates of World, India, Taiwan, Jamaica and Sierra Leone's Total Volume of Ginger Export Between 1960 and 1987

Year	World	India	Taiwan	Jamaica	Sierra Leone
1960-65	-2.7	-1.8	-	-4.9	-7.8
1965-70	-15.4	-16.4	-	-15.6	-7.8
1970-75	39.6	11.0	-	24.6	-12.9
1975-80	11.2	13.6	14.0	-26.0	49.6
1980-85	2.0	2.2	5.5	-12.9	-
1985-87	-3.3	-42.3	-26.1	Nil	-
1960-87	4.8	-3.0	-	-7.3	-

Source: Computed And Compiled From Table -1

CHART - 2

ANNUAL AVERAGE COMPOUND GROWTH RATES OF WORLD,INDIA,TAIWAN,JAMAICA & SIERRA LEONE'S TOTAL VOLUME OF GINGER EXPORTS



21.5A

From the table 2 it is clear that the trends in annual average compound growth rates in world export as well as exports of ginger from India, Taiwan, Jamaica and Sierra Leone have been faltering between 1960 and 1987. On critical examination of the growth rates, it is seen that world and India had mixed trends of negative and positive compound growth rates. They recorded negative compound growth rates during 1960-65, 1965-70 and 1985-87, whereas the growth rates were positive during 1970 to 1985. Taiwan witnessed positive compound growth rates throughout the period except 1985-87. As far as Jamaica and Sierra Leone are concerned, they have registered positive compound growth rates only during 1970-75 and 1975-80 respectively (Chart-2). On the whole, world has done fairly well as compared to major exporting nations as the growth rate was positive only in case of world exports between 1960 and 1987.

Trends In India's Exports:

Table 3 exhibits the trends in exports of dry ginger (quantity, value and unit value) from India between 1960-61 and 1988-89.

Table 3 reveals that the total quantity of dry ginger exported from India has declined by less than 1 time between 1960-61 and 1988-89. Whereas total value earned from the exports of dry ginger has risen by nearly 12 times during the same

Table -3

Trends In Exports of Dry Ginger (Quantity, Value And Unit Value) From India Between 1960-61 To 1988-89

Q = ('000 tonnes)
V = (Rs. crores)

Year	Quantity Exported	Value Earned	Unit Value (Rs. per kg.)
1960-61	5.6	0.8	1.4
1965-66	3.9	1.3	3.3
1970-71	3.1	2.6	8.4
1975-76	4.8	4.1	8.5
1980-81	5.6	2.9	5.2
1981-82	4.7	4.0	8.5
1982-83	3.9	5.9	15.1
1983-84	4.6	11.9	25.9
1984-85	7.3	18.7	25.6
1985-86	6.8	10.8	15.9
1986-87	4.8	5.7	11.9
1987-88	2.6	4.8	18.5
1988-89*	5.1	9.2	18.0
% Increase or decrease over 1960-61	-8.9	1050.0	1185.7

*Provisional Figures

Source: Spices Board, Cochin.

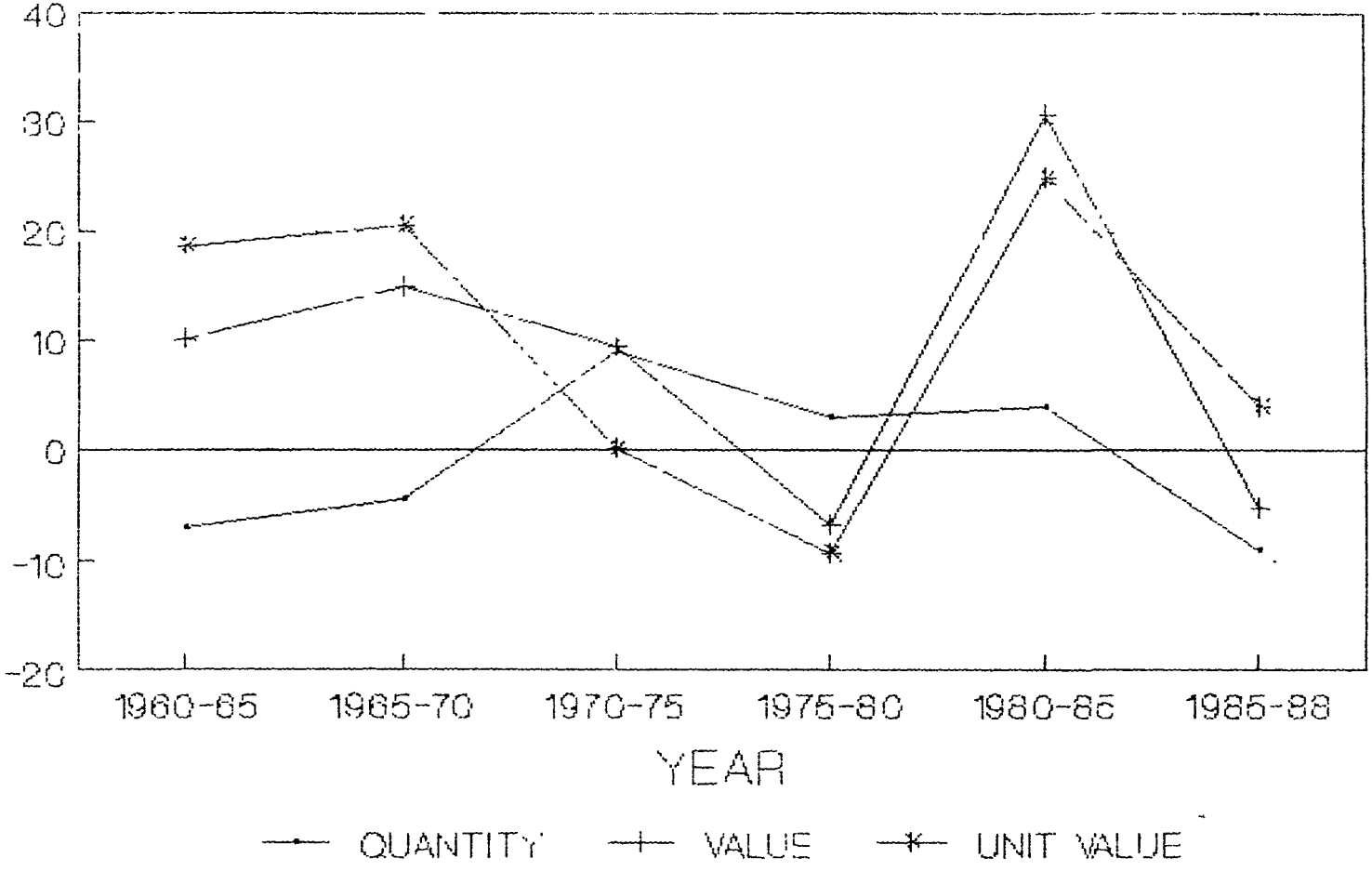
period. This indicates that inspite of decrease in volume of export, the value realised from exports of dry ginger has increased considerably. This may be ascribed to an unprecedented hike in prices of dry ginger in international market. The unit value realisation has, thus, gone up by nearly 13 times. According to the latest information India exported 7.3 thousand tonnes of dry ginger valued at Rs. 12.7 crores in 1989-90. It is also evident from the table that 1984-85 was the year when India could realise Rs. 18.7 crores (record) from the export of 7.3 thousand tonnes of dry ginger. It means that prices ruled higher in 1984-85 as compared to 1989-90. This all shows that the trends in volume, value and unit value of export have been fluctuating and price is the dominant factor in determining the level of export. Therefore, price has to be stabilised for the steady growth of ginger export.

Table 4 indicates the annual average compound growth rates in volume, value and unit value realisation of dry ginger between 1960-65 and 1985-88.

If we look at table 4, it appears that during 1960-65 and 1965-70 the annual average compound growth rates in respect of total volume of ginger export were negative, while unit value realisation from ginger export recorded much better compound growth rates as compared to total value of ginger export.

CHART - 3

ANNUAL AVERAGE COMPOUND GROWTH RATE IN EXPORT OF GINGER FROM INDIA DURING 1960-65 TO 1985-88



(QUANTITY, VALUE, UNIT VALUE)

Table -4

Trends In Annual Average Compound Growth Rates In Export of Dry Ginger (Quantity, Value and Unit Value) During 1960-65 To 1985-88

Year	Volume of Export Annual Average Compound Growth Rates	Value of Export Annual Average Compound Growth Rates	Unit Value Annual Average Compound Growth Rates
1960-65	-7.0	10.2	18.7
1965-70	-4.5	14.9	20.5
1970-75	9.1	9.5	0.2
1975-80	3.1	-6.7	-9.4
1980-85	4.0	30.7	25.0
1985-88	-9.1	-5.2	4.0
1960-88	-0.3	9.1	9.5

Source: Computed And Compiled from Table-3

Table -5

Trends In Percentage share of Dry Ginger in Total Spices Export Earnings From 1960-61 To 1988-89

Year	Value of Spices Exports	Value of Ginger Exports	% Share of Ginger in Total
1960-61	16.4	0.8	4.9
1965-66	23.0	1.3	5.7
1970-71	38.8	2.6	6.7
1975-76	72.7	4.1	5.6
1980-81	117.0	2.9	2.5
1981-82	92.3	4.0	4.3
1982-83	92.4	5.9	6.4
1983-84	111.7	11.9	10.7
1984-85	209.0	18.7	8.9
1985-86	282.5	10.8	3.8
1986-87	281.9	5.7	2.0
1987-88	298.0	4.8	1.6
1988-89	282.7	9.2	3.3
% Increase or decrease over 1960-61	1623.8	1050.0	-1.6

Source: Spices Board, Cochin

However, during 1970-75 total value realised from the export of ginger and total volume of ginger exported witnessed better compound growth rates, whereas unit value realisation of ginger export registered very insignificant growth rate. Between 1975 and 1980 total volume of ginger export registered positive annual growth rate, while total value and unit value of ginger export witnessed higher negative growth rates. The period 1980-85 was good for all as total volume, total value and unit value realisation of ginger export registered better compound growth rates. However, the growth rate was lowest in case of total volume of ginger export. During 1985-88 unit value realisation of ginger export witnessed positive compound growth rate, while total volume of ginger exported and total value earned from export of ginger showed negative growth rates (Chart-3). On the whole, unit value realisation of export has done well as it has recorded better compound growth rate as compared to total volume and total value of ginger exports between 1960 and 1988.

Table 5 shows the trends in total earnings from exports of spices, total earnings from exports of dry ginger and the relative share of dry ginger in total spices export earnings from 1960-61 to 1988-89.

It is clear from table 5 that total earnings from exports of spices recorded an overall increase of more than

17 times in 1988-89 over 1960-61. Total earnings from exports of dry ginger increased by nearly 12 times during the same period. It means that the rate of increase in total earnings from exports of spices is much higher than the rate of increase in earnings from exports of dry ginger. This may be attributed to higher rate of growth in earnings from exports of other spices (pepper and turmeric) as compared to the growth rate in export earnings from ginger. Table 5 further indicates that due to lower increase in value of ginger exports, the share of ginger in total spices export earnings has declined by 1.6 percent during the period under review.

Table 6 shows the trends in annual average compound rates in spices export earnings and earnings from exports of ginger between 1960-65 and 1985-88.

From the table 6 it appears that as a whole, earnings from export of spices has done fairly well as it has recorded faily better compound growth rates during the entire period of study except the period of 1985-88.

Trends In Share of Export To Production of Ginger:

Table 7 is an indicative of the trends in production, export and the relative share of export to total production of dry ginger during 1960-61 to 1988-89.

Table -6

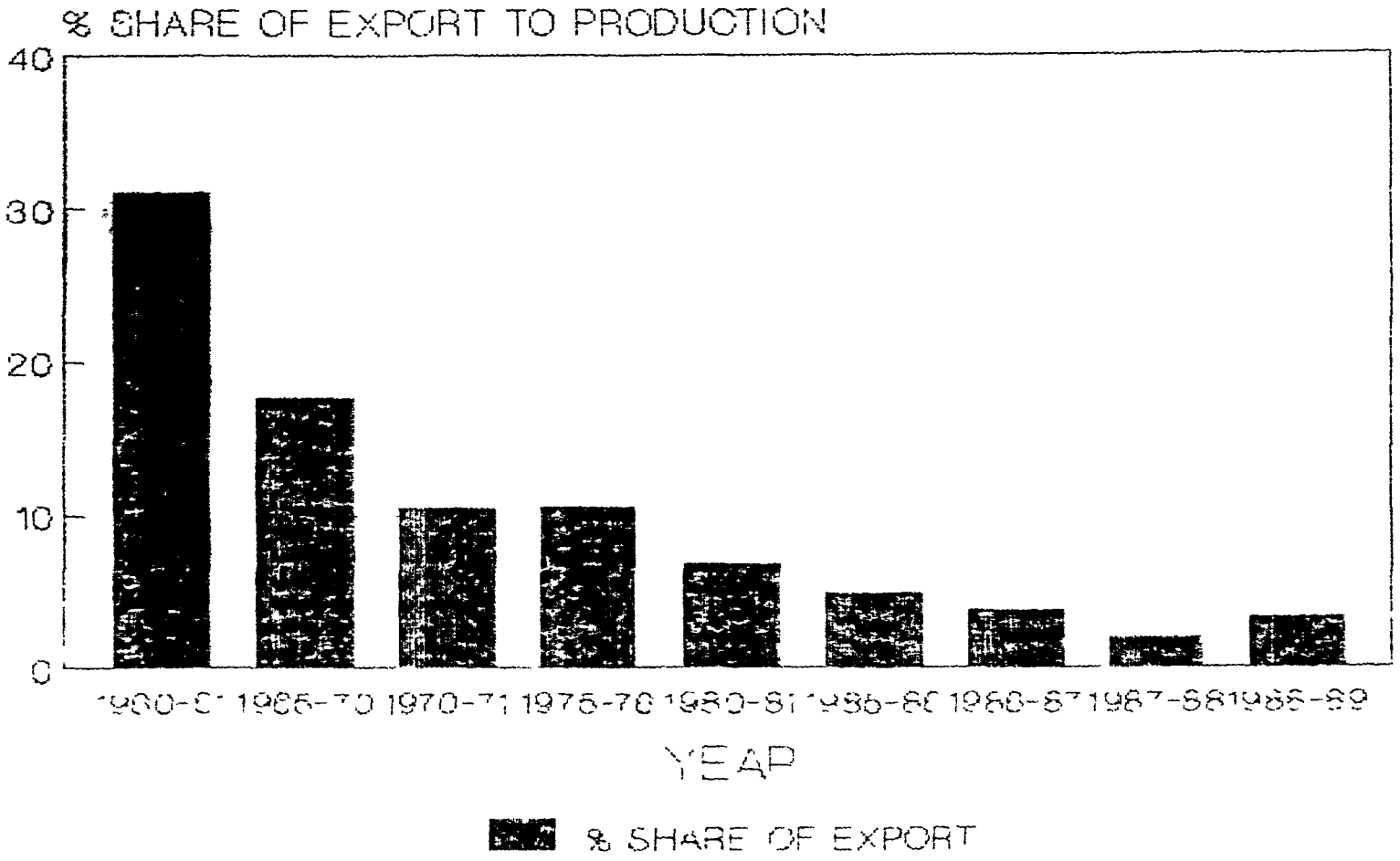
Trends In Annual Average Compound Growth Rates In Earnings From Exports of Spices And Earnings From Exports of Dry Ginger During 1960-65 To 1985-88

Year	Earnings from Exports of Spices	Earnings From Exports of Dry Ginger
	Annual Average Compound Growth Rates	Annual Average Compound Growth Rates
1960-65	7.0	10.2
1965-70	11.0	14.9
1970-75	13.4	9.5
1975-80	10.0	-6.5
1980-85	19.3	30.7
1985-88	Neg.	-5.2
1960-88	10.7	9.1

Source: Computed And Compiled From Table -5

CHART - 4

RELATIVE SHARE OF EXPORT TO TOTAL PRODUCTION OF GINGER DURING 1960-61 TO 1988-89



(IN %)

Table -7

Trends In Percentage share of Export To Production of Dry Ginger From 1960-61 to 1988-89

Q = ('000 tonnes)

Year	Production	Export	% share of Export to Production
1960-61	18.0	5.6	31.1
1965-66	22.0	3.9	17.7
1970-71	29.6	3.1	10.5
1975-76	45.2	4.8	10.6
1980-81	82.4	5.6	6.8
1981-82	89.7	4.7	5.2
1982-83	94.2	3.9	4.1
1983-84	121.3	4.6	3.8
1984-85	133.9	7.3	5.5
1985-86	138.0	6.8	4.9
1986-87	127.0	4.8	3.8
1987-88	135.5	2.6	1.9
1988-89	153.6	5.1	3.3
% Increase or decrease over 1960-61	753.3	-8.9	-27.8

Source: Production; Directorate of Economics And Statistics, New Delhi.
Export: Same as table 3

Data set out in table 7 reveal that the total production of dry ginger has gone up by nearly 9 times between 1960-61 and 1988-89. While total export of dry ginger has declined by less than 1 time during the same period. It means that inspite of better production performance the level of export has declined over the period under review. This has been mainly because of higher domestic consumption. Another factor has been that internal prices are higher than export prices. As a result the share of ginger export in total production of ginger has decreased by 27.8 percent between 1960-61 and 1988-89 (Chart-4).

Table -8

Trends In Annual Average Compound Growth Rates In Export and Production of Ginger Between 1960-65 and 1985-88

Year	Production Annual Average Compound Growth Rates	Export Annual Average Compound Growth Rates
1960-65	4.0	-7.0
1965-70	6.1	-4.5
1970-75	8.8	9.1
1975-80	12.8	3.1
1980-85	10.9	4.0
1985-88	3.6	-9.1
1960-88	8.0	-0.3

Source: Computed and Compiled from Table -7

Table 8 shows the trends in annual average compound growth rates in total production and total export of dry ginger from 1960-65 to 1985-88.

It is apparent from the table 8 that total production of ginger has recorded much better annual average compound growth rates as compared to the growth rates recorded by total exports of ginger throughout the period under study except 1970-75.

Direction of Ginger Exports:

India exports ginger to a fairly large number of countries. The major outlets for Indian ginger are Saudi Arabia, U.S.A., Yemen A.R., Aden, Morrocco, U.A.E., Netherlands, Canada, Spain and Czechoslovakia. Till mid sixtees Aden was the largest importer of Indian ginger accounting for more than 43 percent of the total Indian ginger exports. But India has lost this major traditional market in the eighties. In 1986-87 the offtake by Aden was only 9.4 percent of the total ginger exports from India (Table-9). However, India has been able to increase its exports to other traditional countries like Saudi Arabia, Yemen A.R., Morrocco, Netherlands and U.S.A. Saudi Arabia is the largest importer of Indian ginger accounting for 40 to 50 percent of the total India's ginger exports.

Table 9 shows the trends in country-wise exports of dry ginger from India between 1960-61 and 1988-89.

Data presented in table 9 exhibit that total exports of dry ginger from India to Saudi Arabia recorded an overall increase of more than 5 times between 1960-61 and 1988-89. Similarly, total exports of dry ginger to U.S.A. witnessed an overall rise of more than 2 times during 1965-66 to 1988-89. Total exports of dry ginger to Yemen A.R. have risen by nearly 16 times. However, export to Aden has declined by less than 1 time in 1986-87 over 1960-61.[1] Total exports of ginger to Morrocco has increased by more than 14 times between 1970-71 and 1988-89. Total exports of dry ginger from India to U.K. registered an overall decline of less than 1 time during the period under review.

Total ginger exports from India to U.A.E. recorded an overall increase of more than 5 times during 1970-71 to 1988-89. Likewise, total exports of Indian ginger to Netherlands went up by nearly 4 times between 1960-61 and 1988-89. Similarly, total ginger exports to Canada and Spain showed an overall increase of more than 2 times and 6 times respectively during 1965-66 to 1988-89 and 1980-81 to 1988-89. However, total ginger exports to Czechoslovakia went down by less than 1 time between 1970-71 and 1988-89.

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1. The figures for the years 1987-88 and 1988-89 are not available.

Table -9

Trends In Country-wise Export of Dry Ginger From India During 1960-61 To 1988-89

Q = (M. ton)

Country	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89	1960-61*
Saudi Arabia	388.0 (7.0)	789.0 (19.8)	1362.0 (43.2)	1966.0 (41.0)	1308.0 (23.6)	3155.0 (46.3)	1356.0 (28.0)	1314.0 (50.0)	2055.0 (39.5)	429.6
U.S.A.	-	170.0 (4.3)	41.0 (1.3)	192.0 (4.0)	767.0 (13.8)	1189.0 (17.4)	630.0 (13.0)	197.0 (7.5)	405.0 (7.8)	138.2[a]
Yemen A.R.	41.0 (0.7)	-	48.0 (1.5)	431.0 (9.0)	545.0 (9.8)	338.0 (5.0)	569.0 (11.7)	374.0 (14.2)	646.0 (12.4)	1475.6
Aden	2247.0 (40.3)	1891.0 (47.4)	737.0 (23.4)	588.0 (12.3)	236.0 (4.3)	289.0 (4.2)	453.0 (9.4)	-	-	-
Morrocco	-	-	22.0 (0.7)	200.0 (4.2)	915.0 (16.5)	485.0 (6.7)	320.0 (6.6)	-	310.0 (6.0)	-
U.K.	346.0 (6.2)	77.0 (1.9)	13.0 (0.4)	152.0 (3.2)	263.0 (4.7)	312.0 (4.6)	269.0 (5.6)	98.0 (3.7)	141.0 (2.7)	-59.2
U.A.E.	-	-	31.0 (1.0)	49.0 (1.0)	211.0 (3.8)	104.0 (1.5)	252.0 (5.2)	35.0 (1.3)	158.0 (3.0)	-
Netherlands	37.0 (0.7)	9.0 (0.2)	2.0 (Neg)	126.0 (2.6)	71.0 (1.3)	87.0 (1.3)	233.0 (4.8)	82.0 (3.1)	146.0 (2.8)	294.6
Canada	-	46.0 (1.2)	15.0 (0.5)	78.0 (1.6)	192.0 (3.5)	123.0 (1.8)	109.0 (2.3)	33.0 (1.3)	98.0 (1.9)	113.0[a]
Spain	-	-	-	-	1.0 (Neg)	8.0 (0.1)	9.0 (0.2)	2.0 (Neg)	6.0 (0.1)	-
Czechoslovakia	-	-	41.0 (1.3)	29.0 (0.6)	29.0 (0.5)	20.0 (0.3)	11.0 (0.2)	10.0 (0.4)	35.0 (0.7)	-
Others	2518.0 (45.1)	1005.0 (25.2)	844.0 (26.7)	975.0 (2044)	1012.0 (18.2)	733.0 (10.8)	632.0 (13.0)	483.0 (18.4)	1198.0 (23.0)	-52.4
Total	5577.0	3987.0	3156.0	4786.0	5550.0	6816.0	4843.0	2628.0	5198.0	- 6.8

a = Indicates increase over 1965-66, *Increase or decrease over 1960-61
Figures in brackets are the percentages

Source: Directorate General of Commercial Intelligence And Statistics, Calcutta.

From the foregoing analysis, it has emerged that the exports of ginger to all the selected countries have been faltering between 1960-61 and 1988-89. Out of 11 countries selected for comparative study, exports to 8 countries such as Morrocco, Spain, Yemen A.R., U.A.E., Saudi Arabia, Netherlands, U.S.A. and Canada have increased considerably during the period under study. Whereas exports to Aden, U.K. and Czechoslovakia have declined during the same period. Among these three countries, exports to Aden have declined drastically.

On assessment of the relative shares of different selected markets in total India's exports of ginger, it is seen that the share of Saudi Arabia, Yemen A.R., Morrocco, U.S.A., Netherlands, U.A.E., Canada and Spain has increased by 32.5 percent, 11.7 percent, 5.3 percent, 3.5 percent, 2.1 percent, 2.0 percent, 0.7 percent and 0.1 percent respectively between 1960-61 and 1988-89. However, the share of Aden, U.K. and Czechoslovakia in total Indian ginger exports has declined by 30.9 percent, 3.5 percent and 0.6 percent respectively during the period under review.

Trends In Annual Average Compound Growth Rates:

Table 10 shows the trends in annual average compound growth rates in country-wise exports of dry ginger from India during 1960-65 to 1985-88.

It is clearly visible from the table 10 that during 1960-65 and 1965-70 export of ginger to Saudi Arabia has done fairly well as it has recorded much better compound growth rates than other countries under reference. Between 1970 and 1975 Aden and Czechoslovakia were the countries which had witnessed negative compound growth rates. But Netherlands registered highest annual average compound growth rate. During 1975-80, however export of ginger to Netherlands, Aden and Saudi Arabia had recorded negative compound growth rates.

Table -10

Trends In Annual Average Compound Growth Rates In Country-wise Exports of Dry Ginger From India During 1960-65 to 1985-88

Country	1960-65	1965-70	1970-75	1975-80	1980-85	1985-88	1960-88
Saudi Arabia	15.3	11.5	7.6	-7.8	19.3	-13.3	6.1
U.S.A.	-	-24.8	36.2	31.9	9.2	-30.2	-
Yemen A.R.	-	-	55.1	4.8	-9.1	24.1	-
Aden	3.4	-17.2	-4.4	-16.7	4.1	-	-
Morrocco	-	-	55.5	35.5	-12.9	-12.2	-
U.K.	-26.0	-29.9	63.5	11.6	3.5	-23.3	-3.2
U.A.E.	-	-	9.6	33.9	-13.2	15.0	-
Netherlands	-24.6	-26.0	129.0	-10.8	4.1	18.8	5.0
Canada	-	-20.0	39.0	19.7	-8.5	-7.3	-
Spain	-	-	-	-	51.6	-9.1	-
Czecnoslovakia	-	-	-6.7	Nil	-7.2	20.5	-
Others	-16.8	-3.4	2.9	0.7	-6.2	17.8	-2.6
Total	-7.0	-4.5	9.1	3.1	4.0	-9.1	-0.3

Source: Computed and Compiled From Table -9

While exports to rest of the countries recorded better compound growth rates. During the period 1980-85 export of ginger to Spain showed highest annual average growth rate followed by Saudi Arabia, U.S.A., Aden, Netherlands and U.K., whereas export of ginger to Yemen A.R., Morrocco, U.A.E., Canada & Czechoslovakia recorded negative compound growth rates. Between 1985 and 1988 out of 10 countries, exports of ginger to only four countries viz; Yemen A.R., U.A.E., Netherlands and Czechoslovakia registered positive annual average growth rates, while export of ginger to Saudi Arabia, U.S.A., Morrocco, U.K., Canada and Spain recorded negative compound growth rates. As a whole (between 1960 and 1988) Yemen A.R., Saudi Arabia and Netherlands have done better than the rest of the countries.

Conclusion:

From the foregoing discussion it has been observed that world and Taiwan's exports (quantity) of ginger have increased between 1960 and 1987. Whereas the exports of ginger from India, Jamaica and Sierra Leone have registered an alarming decrease during the same period. Accordingly, the share of India, Jamaica and Sierra Leone in world export of ginger has decreased. It is a fact that share of Taiwan has also declined but the share of Taiwan has not fallen as much as that of India, Jamaica and Sierra Leone.

It has also emerged that the share of ginger in total spices export earnings has come down despite the fact that total value realised from export of ginger has increased between 1960-61 and 1988-89. Similarly, the relative share of export to production of ginger has also gone down to a very low level. So far as the direction of ginger exports of India is concerned, it is witnessed a considerable shift in import pattern of many countries during the period under study. In the sixtees Aden was the largest importer of Indian ginger accounting for more than 43 percent of the total India's ginger export. However, in the eightees the offtake of Indian ginger by Aden has declined and it has been importing only 6 percent of the total exports of ginger from India. Another major change was that in the sixtees. Saudi Arabia, U.S.A. and Yemen A.R. together accounted for nearly 18 percent of the total ginger exports from India. But in the eightees these three countries have been importing more than 60 percent of the total export of ginger from India. Export to U.K. and Czechoslovakia have also declined.

Chapter - IX

EXPORT PERFORMANCE OF TURMERIC

Chapter - IX

EXPORT PERFORMANCE OF TURMERIC

India produces many spices. However, turmeric has got special significance in every Indian household in view of its holiness and manifold uses in culinary. Apart from this, turmeric is a major item of India's traditional export and thus contributes significantly to the spices economy of India. India is the world's largest producer and exporter of turmeric accounting for nearly 90 percent[1] and 75 percent[2] of the world output and export respectively. After meeting internal requirements, substantial quantity of turmeric is exported which generally accounts for 5 to 10 percent of the total spices export earnings. In recent years the export earnings of turmeric in relation to the export earnings of other major spices like cardamom, chillies and ginger have been higher and this is why it has become the second largest foreign exchange earner after pepper.

Turmeric is valued as a spice and colourent. The world-wide use of turmeric is as a major ingredient in curry powder. It is also used in other spice mixes. In these uses turmeric is valued as much for its distinctive flavour and aroma. In the U.S.A., turmeric is required mainly for its colouring power and used to colour mustards. In India, it is used as an important condiment and in the preparation of curry powder. It

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1. Khan, M.T. "Spices In Indian Economy", Academic Foundation, New Delhi, 1990, p-9.
2. Tropical Products Institute (London). Selected Markets for Turmeric, Coriander seed, Cumin seed, Fenugreek seed and Curry powder, Sept., 1982, p-8.

is also used as a colouring matter in drugs, fabrics, confectionary and food industries. In Iran, turmeric is principally used for flavouring and colouring of rice dishes. There are significant uses of turmeric Oleoresins also. It is used to add food colour particularly in mustard pickles in North America.

No country in the world exports as fine quality of turmeric as India. The turmeric of India namely Alleppey Variety (Kerala) gets preference over the turmeric of other countries in international market because of its high curcumin content. Generally, India exports 5 to 9 percent of the total turmeric production to numerous countries of the world. The U.S.A., Japan, Iran, U.A.E., U.K., Singapore, Saudi Arabia, Netherlands, Kuwait, Sri Lanka, Canada and U.A.R. have been the major outlets for Indian turmeric. Between 1970 and 1980 Iran was the largest importer of Indian turmeric accounting for about 19 percent of the total turmeric exports from India. However, exports to Iran has declined during the decade of the 1980s. In recent years, United Arab Emirates has emerged as the largest outlet for Indian turmeric. In 1988-89 U.A.E. alone imported nearly 41 percent of the total Indian turmeric exports. In the light of the above, this chapter describes in brief the world trade in turmeric. It also analyses the trends in India's exports of turmeric, trends in relative share of

turmeric in the total spices export earnings, trends in relative share of export to total production of turmeric and the trends in direction of turmeric exports from India.

World Export of Turmeric:

India has been enjoying almost monopoly in the world trade of turmeric since ancient times. But no accurate statistics on the trends in world exports of turmeric is available. It is, however, estimated that world market for turmeric exists normally between 20,000 and 22,000 tonnes.[1] India usually accounts for two-third or more of the total world exports.[2] China and Pakistan are considered as the other major exporters of turmeric in the world. Though, the product of these countries are not of good quality but they offer turmeric at lower prices in international market. Besides the above three countries, Bangladesh, Nepal, Malaysia, Indonesia, Thailand, Burma, Vietnam and Sri Lanka are also emerging as new exporters of turmeric.

Trends In India's Exports:

Table 1 gives the trends in exports of turmeric (quantity, value and unit value) from India between 1960-61 and 1988-89.

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1. Proceedings of the Workshop on Strategies for Export Development of Spices, April 9-11, 1989, Pub: Spices Board, Cochin, p-75.
2. Selected Markets for Turmeric, Coriander seed, Cumin seed, Fenugreek seed and curry powder, op. cit, p.8

Table -1

Trends In Export of Turmeric (Quantity, Value and Unit Value) From India During 1960-61 To 1988-89

Q = ('000 tonnes)
V = (Rs. crores)

Year	Quantity Exported	Value Earned	Unit value (Rs. per kg.)
1960-61	2.3	0.3	1.1
1965-66	10.4	1.4	1.3
1970-71	11.1	3.8	3.4
1975-76	11.7	4.2	3.6
1980-81	11.4	6.0	5.3
1981-82	12.0	5.2	4.3
1982-83	7.6	4.2	5.5
1983-84	10.9	11.0	10.1
1984-85	12.8	17.1	13.4
1985-86	8.6	12.0	14.0
1986-87	19.6	19.2	9.8
1987-88	8.7	9.2	10.6
1988-89*	16.5	17.4	10.5
% Increase or decrease over 1960-61	617.4	5700.0	854.5

* Provisional Figures

Source: Spices Board, Cochin

It is seen from table 1 that the total quantity of turmeric exported from India has risen by more than 7 times between 1960-61 and 1988-89. Total value realised from the exports of turmeric has also recorded an overall rise of 58 times during the same period. It means that the rate of growth in value of exports is much higher than the rate of growth in volume of exports. This may be attributed to an unprecedented rise in unit value realisation from turmeric in foreign markets. This is clearly visible from the table that the unit value realisation per kg. has gone up nearly 10 times.

It is clear from the above table that there has been a wide fluctuation in prices of turmeric ranging between Rs. 1.1 in 1960-61 to Rs. 10.5 per kg. in 1988-89 which has reflected in total export earnings also.

Trends In Annual Average Compound Growth Rates

Table 2 shows the trends in annual average compound growth rates in volume, value and average F.O.B. export value of turmeric from India during 1960-65 to 1985-88.

From the table 2 it appears that between 1960 and 1970 value realised from exports of turmeric has done fairly well as it has recorded higher compound growth rates than the rates of growth recorded by volume of turmeric exported and average

Table -2

Trends In Annual Average Compound Growth Rates In Volume, Value And Average F.O.B. Export Value of Turmeric During 1960-65 To 1985-88

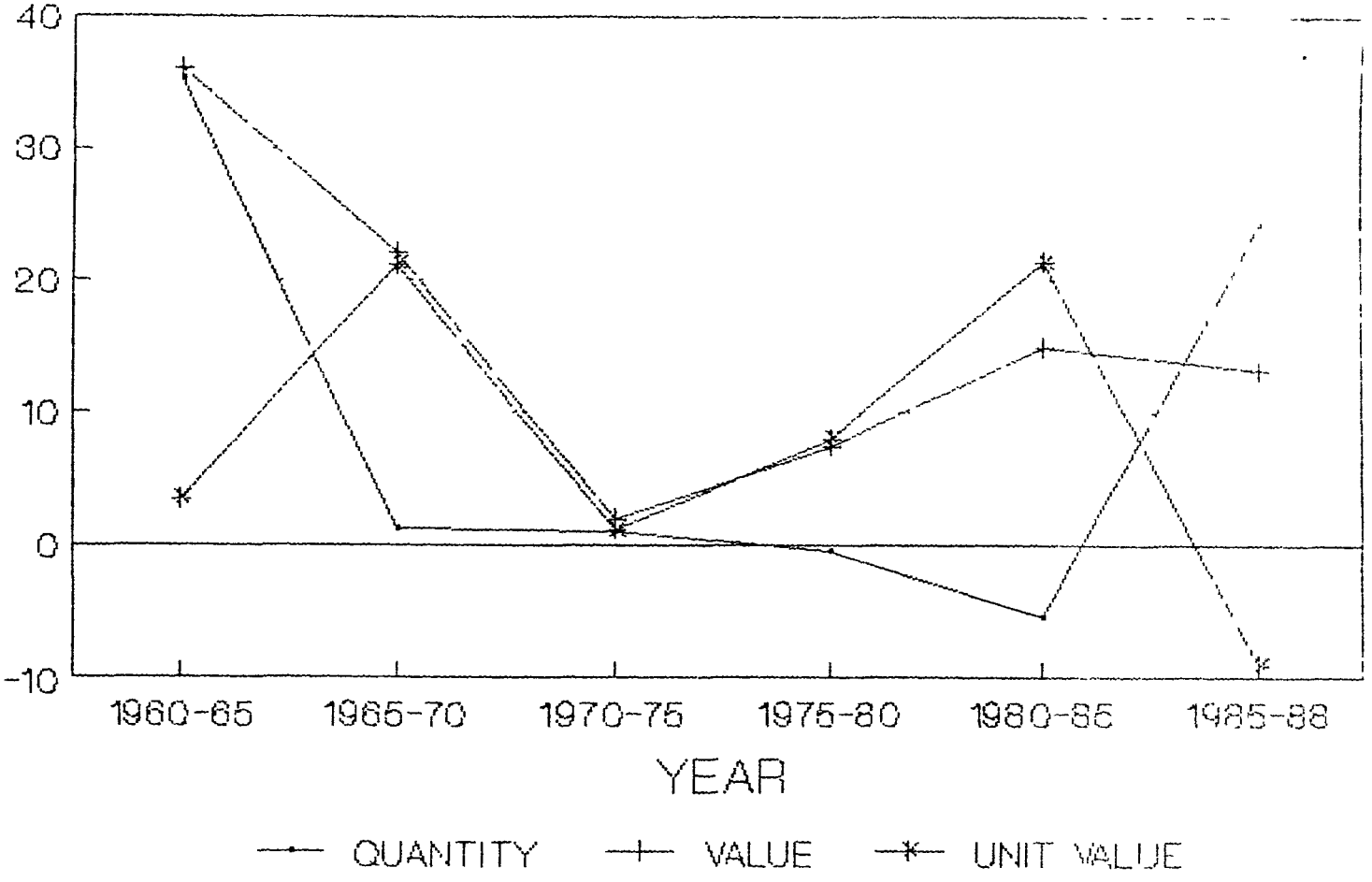
Year	Volume of Export	Value of Export	Average F.O.B. Export price
	Annual Average Compound Growth Rates	Annual Average Compound Growth Rates	Annual Average Compound Growth Rates
1960-65	35.2	36.0	3.4
1965-70	1.3	22.1	21.2
1970-75	1.0	2.0	1.1
1975-80	-0.5	7.4	8.0
1980-85	-5.5	14.9	21.4
1985-88	24.3	13.2	-9.1
1960-88	7.3	15.6	8.4

Source: Computed and Compiled From Table-1

F.O.B. export price of turmeric. Between 1975 and 1985 average F.O.B. export price of turmeric registered much better annual average growth rates than the value of turmeric export. Whereas volume of turmeric export witnessed negative compound growth rates. During 1985-88 volume of turmeric export, however, recorded much higher compound growth rate than value of

CHART - 1

ANNUAL AVERAGE COMPOUND GROWTH RATE IN EXPORT OF TURMERIC FROM INDIA DURING 1960-65 TO 1985-88



(QUANTITY, VALUE, UNIT VALUE)

turmeric exported and average F.O.B. export price of turmeric. Between 1975 and 1985 average F.O.B. export price of turmeric registered much better annual average growth rates than the value of turmeric export. Whereas volume of turmeric export witnessed negative compound growth rates. During 1985-88 volume of turmeric export, however, recorded much higher compound growth rates than value of turmeric export. While average F.O.B. export price of turmeric showed negative compound growth rate (Chart-1). On the whole, (between 1960 and 1988) total value realised from exports of turmeric has done fairly well as compared to total volume of turmeric export and average F.O.B. export price of turmeric.

Relative Share :

Table 3 shows the trends in total earnings from export of spices, total earnings from export of turmeric and relative share of turmeric in total spices exports earnings from 1960-61 to 1988-89.

Data set out in table 3 exhibits that earnings from exports of spices recorded an overall increase of more than 17 times in 1988-89 over 1960-61. Total earnings from export of turmeric witnessed an overall rise of 58 times during the same period. This shows that rate of increase in earnings from export of turmeric is much higher than the rate of increase in earnings from export of total spices. This has been mainly because of low rate of growth recorded in case of other spices such as cardamom, chillies and ginger as compared to the rate of growth in turmeric export. As a result, the relative share of turmeric in total spices export earnings has also gone up by 5 percent during the period under review.

Table -3

Trends In Percentage Share of Turmeric in Total Spices Export Earnings From 1960-61 to 1988-89

V = (Rs. crores)

Year	Total Earnings From spices exports	Total Earnings From Turmeric Exports	% share of Turmeric
1960-61	16.4	0.3	1.2
1965-66	23.0	1.4	6.0
1970-71	38.8	3.8	9.8
1975-76	72.7	4.2	5.8
1980-81	117.0	6.0	5.1
1981-82	92.3	5.2	5.6
1982-83	92.4	4.2	4.5
1983-84	111.7	11.0	9.8
1984-85	209.0	17.1	8.2
1985-86	282.5	12.0	4.2
1986-87	281.9	19.2	6.8
1987-88	298.0	9.2	3.0
1988-89	282.7	17.4	6.2
% Increase or decrease over 1960-61	1623.8	5700.0	5.0

Source: Spices Board, Cochin.

Table -4

Trends In Annual Average Compound Growth Rates In Total Earnings From Spices Export And Total Earnings From Turmeric Export Between 1960-65 and 1985-88

Year	Export Earnings From Spices	Export Earnings From Turmeric
	Annual Average Compound Growth Rates	Annual Average Compound Growth Rates
1960-65	7.0	36.0
1965-70	11.0	22.1
1970-75	13.4	2.0
1975-80	10.0	7.4
1980-85	19.3	14.9
1985-88	Neg.	13.2
1960-88	10.7	15.6

Source: Computed and Compiled From Table -3

Table 4 shows the trends in annual average compound growth rates in total earnings from exports of spices and total earnings from exports of turmeric during 1960-65 to 1985-88.

From the table 4 it emerges that annual average compound growth rates in regard to earnings from exports of turmeric has been better than the total earnings from exports of spices between 1960 and 1988. However, on critical examination

it is seen that during 1970-75, 1975-80 and 1980-85 the compound growth rates were much better in case of total earnings from exports of spices than the total earnings from exports of turmeric.

Table -5

Trends In Percentage Share of Export To Production Of Turmeric From 1960-61 To 1988-89

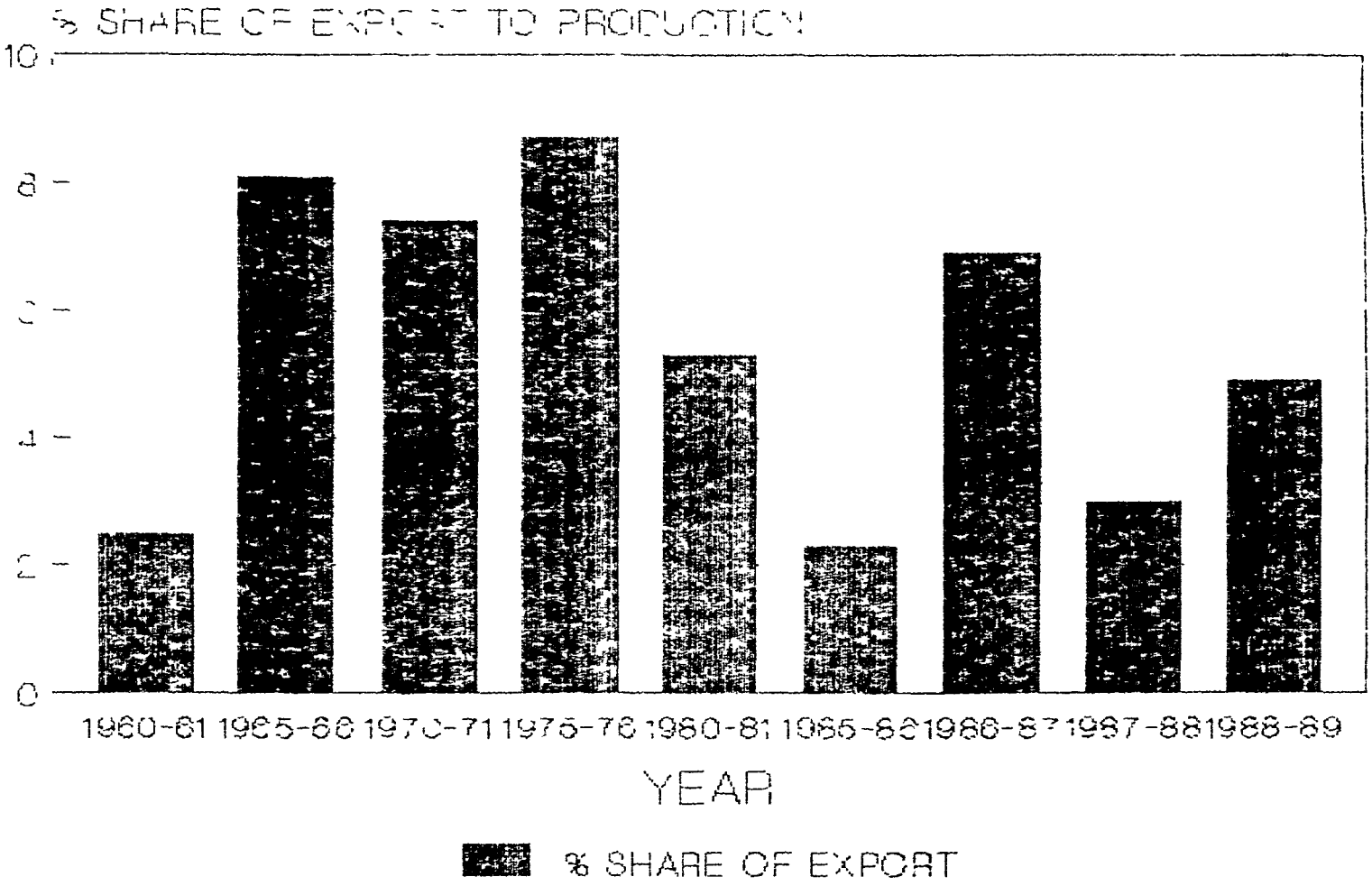
Q = ('000 tonnes)

Year	Production	Export	% Share of Export To Production
1960-61	93.0	2.3	2.5
1965-66	128.0	10.4	8.1
1970-71	150.7	11.1	7.4
1975-76	135.2	11.7	8.7
1980-81	216.9	11.4	5.3
1981-82	191.3	12.0	6.3
1982-83	173.1	7.6	4.4
1983-84	212.5	10.9	5.1
1984-85	259.2	12.8	4.9
1985-86	367.1	8.6	2.3
1986-87	280.6	19.5	6.9
1987-88	294.9	8.7	3.0
1988-89	339.8	16.5	4.9
% Increase or decrease over 1960-61	265.4	617.4	2.4

Source: 1. Directorate of Economics and Statistics, New Delhi
2. Spices Board, Cochin.

CHART - 2

RELATIVE SHARE OF EXPORT TO TOTAL PRODUCTION OF TURMERIC DURING 1960-61 TO 1988-89



Trends In Share of Export To Production of Turmeric:

Table 5 is an indicative of the trends in total production, total export and relative share of export to total production of turmeric from 1960-61 to 1988-89.

It is seen from table 5 that the total production of turmeric recorded an overall increase of nearly 4 times during 1960-61 to 1988-89. Similarly, total export of turmeric registered an overall rise of more than 7 times during the same period. It means that the rate of increase in volume of turmeric exports is much higher than the rate of increase in total production of turmeric. This shows that there is enormous scope of increasing export of turmeric if production is increased. It is also evident from the table that the relative share of export to production of turmeric has also increased by 2.4 percent (i.e. from 2.5 percent to 4.9 percent) during the period under reference (Chart-2). This all means that turmeric has emerged as an export oriented spice.

Table 6 gives the trends in annual average compound growth rates in total production and total export of turmeric between 1960-65 and 1985-88.

Data set out in table 6 reveal that total export of turmeric has done well as compared to total production of turmeric so far as annual average compound growth rates are concerned during the periods 1960 and 1988. However, it is seen

Table -6

Trends In Annual Average Compound Growth Rates In Export and Production of Turmeric During 1960-65 to 1985-88

Year	Production Annual Average Compound Growth Rates	Export Annual Average Compound Growth Rates
1960-65	6.6	35.2
1965-70	3.3	1.3
1970-75	-2.1	1.0
1975-80	9.9	-0.5
1980-85	11.0	-5.5
1985-88	2.5	24.3
1960-88	4.7	7.3

Source: Computed And Compiled From Table -5

from the table that total production of turmeric has registered positive annual average growth rates throughout the period under study except during 1970-75. Another noteworthy feature is that during 1980-85 total production of turmeric recorded highest compound growth rate, while the growth rate was negative in case of exports of turmeric.

Direction of Turmeric Exports:

Indian turmeric is exported to different destinations in the world. The major buyers are Japan, U.S.A., U.K., Singapore, Saudi Arabia, Netherlands, Kuwait, Iran, Sri Lanka, Canada and U.A.E. In 1988-89 U.A.E. alone accounted for 6.7 thousand tonnes or 40.8 percent of the total turmeric exports from India followed by U.S.A. 1.7 thousand tonnes (10.0 percent), Japan 1.6 thousand tonnes (9.9 percent), U.K. and Iran 1.1 thousand tonnes each (6.3 percent), Singapore 0.5 thousand ton (3.1 percent), Saudi Arabia 0.3 thousand ton (2.0 percent), Sri Lanka and Kuwait 0.2 thousand ton each (1.2 percent). Netherlands 0.1 thousand ton (0.9 percent) and Canada 0.1 thousand ton (0.7 percent).

Table 7 gives the trends in country-wise exports of turmeric from India during 1960-61 to 1988-89.

It is seen from the table 7 that the total quantity of turmeric exported from India to Japan went up by 1.5 times during 1965-66 to 1988-89. Total exports of turmeric to U.S.A. also increased by 1.4 times. Similarly, total exports of turmeric from India to U.K. registered an overall increase of more than 2 times between 1965-66 and 1988-89. Likewise, total Indian exports to Singapore rose by 1.2 times in 1988-89 over 1970-71.[1]

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1. Figures prior to 1970-71 are not available

Trends In Country-wise Export of Turmeric From India During 1960-61 to 1988-89

Q = (M. ton)

Country	1960-61	1965-66	1970-71	1975-76	1980-81	1985-86	1986-87	1987-88	1988-89*	1965-66**
Japan	N.A.	1072 (10.3)	667 (6.0)	852 (13.0)	866 (13.7)	820 (17.4)	1589 (8.8)	1497 (14.5)	1637 (10.0)	52.7
U.S.A.	N.A.	1181 (11.4)	915 (8.2)	1532 (13.0)	1562 (13.7)	1486 (17.4)	1715 (8.8)	1265 (14.5)	1663 (10.0)	40.8
U.K.	N.A.	502 (4.8)	777 (7.0)	750 (6.4)	407 (3.6)	1139 (13.3)	1733 (8.9)	857 (9.8)	1047 (6.3)	108.6
Singapore	N.A.	-	422 (3.8)	876 (7.5)	923 (8.0)	560 (6.5)	1107 (5.7)	436 (5.0)	512 (3.1)	21.3[a]
Saudi Arabia	N.A.	165 (1.6)	252 (2.3)	508 (4.3)	244 (2.1)	519 (6.0)	1090 (5.6)	399 (4.6)	334 (2.0)	102.4
Netherlands	N.A.	154 (1.5)	175 (1.6)	164 (1.4)	93 (0.8)	238 (2.8)	329 (1.7)	243 (2.8)	147 (0.9)	-4.5
Kuwait	N.A.	338 (3.2)	422 (3.8)	161 (1.4)	31 (0.3)	58 (0.7)	223 (1.1)	243 (2.8)	196 (1.2)	-42.0
Iran	N.A.	746 (7.2)	2364 (21.3)	2115 (18.0)	1952 (17.0)	456 (5.3)	1883 (9.6)	262 (3.0)	1045 (6.3)	40.0
Sri Lanka	N.A.	1225 (11.8)	755 (6.8)	11. (0.1)	311 (2.7)	743 (8.7)	857 (4.4)	296 (3.4)	191 (1.2)	-84.4
Canada	N.A.	116 (1.1)	127 (1.1)	147 (1.3)	155 (1.4)	198 (2.3)	409 (2.1)	136 (1.6)	111 (0.7)	- 4.3
U.A.E.	N.A.	-	312 (2.8)	727 (6.2)	599 (5.2)	628 (7.3)	5952 (30.5)	1217 (13.9)	6746 (40.8)	2062.2[a]
Others	-	4904 (47.1)	3921 (35.3)	3912 (33.3)	4295 (37.6)	1717 (20.0)	2642 (13.5)	1896 (21.7)	2889 (17.5)	-41.1
Total	2310	10403	11109	11755	11438	8562	19529	8747	16518	58.8

* Provisional Figures, Figures in parenthesis show the percentages
** Percentage increase or decrease over 1965-66
a= indicates the increase over 1970-71
Source: Upto 1980-81,D.G.C.I.& S, Calcutta
1985-86 and onwards, Spices Board, Cochin

In the same way, total turmeric exports to Saudi Arabia went up by more than 2 times during the period 1965-66 to 1988-89. However, total exports of turmeric to Netherlands and Kuwait witnessed a decrease of less than 1 time each during the period under review.

Total export of turmeric to Iran has shown an overall increase of 1.4 times during the period 1965-66 to 1988-89. Total exports of turmeric from India to Sri Lanka and Canada has, however, fallen by less than 1 time each during the same period. Contrary to this, total exports of turmeric to U.A.E. has increased substantially and indicated an overall rise of nearly 22 times during the period under review.

From the foregoing discussion it has been clear that the exports of turmeric to different countries had mixed trends during the period 1960-61 to 1988-89. 11 countries were selected for comparative study, out of which 7 countries namely U.A.E., U.K., Saudi Arabia, Japan, U.S.A., Iran and Singapore recorded an increase of 114.6 percent, 4.7 percent, 4.5 percent, 2.3 percent, 1.8 percent, 1.7 percent and 1.2 percent per annum respectively during the period under review. While exports to Sri Lanka, Kuwait, Netherlands and Canada witnessed a decrease

of 84 percent, 42 percent, 4.5 percent and 4.3 percent respectively during the period under study. Among these four countries, exports to Sri Lanka have been considerably decreased.

On examination of the trends in the relative shares of different countries in India's total turmeric exports, it appears that the shares of three countries namely, U.A.E., U.K. and Saudi Arabia have increased by 38.0 percent, 1.5 percent and 0.4 percent respectively during the period 1965-66 to 1988-89. Rest of the eight countries such as Sri Lanka, Kuwait, U.S.A., Iran, Singapore, Netherlands, Japan and Canada have registered a decline in their respective shares in total India's exports of turmeric by 10.6 percent, 2.0 percent, 1.4 percent, 0.9 percent, 0.7 percent, 0.6 percent, 0.4 percent and 0.4 percent respectively during the same period.

Trends In Annual Average Compound Growth Rates:

Table 8 shows the trends in annual average compound growth rates in country-wise exports of turmeric from India between 1965-70 and 1985-88.

It is evident from table 8 that the annual average compound growth rates during 1965-70 in respect of exports of turmeric to Iran was highest, while export of turmeric to Japan, U.S.A. and Sri Lanka witnessed negative compound growth rates.

Table -8

Trends In Annual Average Compound Growth Rates In Country-wise Export of Turmeric From India During 1965-70 to 1985-88

Country	1960-65	1965-70	1970-75	1975-80	1980-85	1985-88	1965-88
Japan	-	-9.0	5.0	0.3	-1.0	25.9	1.9
U.S.A.	-	-5.0	10.9	0.4	-1.0	3.8	1.5
U.K.	-	9.1	-0.7	-11.5	22.9	-2.8	3.2
Singapore	-	-	15.7	1.0	-9.5	-2.9	-
Saudi Arabia	-	8.8	15.0	-13.6	16.3	-13.7	3.1
Netherlands	-	2.6	-1.3	-10.7	20.6	-14.8	-0.2
Kuwait	-	4.5	-17.5	-28.0	13.3	50.0	-2.3
Iran	-	25.9	-2.2	-15.9	-25.2	31.8	1.5
Sri Lanka	-	-9.2	-57.0	95.1	19.0	-36.4	-7.8
Canada	-	1.8	3.0	1.0	5.0	-17.5	-0.2
U.A.E.	-	-	18.4	-3.8	1.0	120.6	-
Others	-	-4.3	Neg.	1.9	-16.8	18.9	-2.2
Total	35.1	1.3	1.0	-0.5	-5.5	24.3	2.0

Source: Computed and Compiled From Table -7
Note : The compound growth rate has not been worked out owing to non-availability of data during 1960-65.

Between 1970 and 1975 export of turmeric to Japan, U.S.A., Singapore, Saudi Arabia, Canada and U.A.E. registered fairly higher compound growth rates, whereas export of turmeric to U.K., Netherlands, Kuwait, Iran and Sri Lanka showed negative compound growth rates. During the period 1975-80 Sri Lanka was the only country to which exports of turmeric showed significant annual average compound growth rate. Between 1980 and 1985 annual average compound growth rates were fairly high in regard to exports of turmeric to U.K., Saudi Arabia, Netherlands, Kuwait, Sri Lanka and Canada, while exports of turmeric to Japan, U.S.A., Singapore and Iran recorded negative growth rates. During 1985-88 export of turmeric to U.A.E. witnessed highest compound growth rate followed by export of turmeric to Kuwait, Iran, Japan and U.S.A., whereas exports to U.K., Singapore, Saudi Arabia, Netherlands, Sri Lanka and Canada registered negative compound growth rate. As a whole, U.K., Saudi Arabia, Japan, U.S.A. and Iran have done well as they have recorded better compound growth rates than other countries between 1965 and 1988.

Conclusion:

From the foregoing pages it has brought out that exports of turmeric have increased both in terms of quantity and value earned between 1960-61 and 1988-89. On assessment of the share

of turmeric in total spices export earnings, it is seen that the share has increased significantly during the same period. It has also emerged that the surpluses for export have increased but it is still very low i.e. 5 to 9 percent of the total production. There has been fall in exports of turmeric to Netherlands, Kuwait, Sri Lanka and Canada. There has been a considerable fall in exports of turmeric to Iran also when it is compared to the figures of the decade of seventies. Apart from this, the share of the U.S.A., Singapore and Japan in total turmeric exports from India has also declined inspite of the increase in total volume of exports to these countries.

Chapter - X

PROBLEMS AFFECTING EXPORTS OF SPICES

Chapter -X

PROBLEMS AFFECTING EXPORTS OF SPICES

India has the prime position in production and export of spices in the world. However, Indian spices have failed in competing with their rivals in the world market and as a result the share of India in the total world export of spices has declined alarmingly (i.e. from 20.5 percent to 9.8 percent) between 1970 and 1988.

Pepper, cardamom, chillies, ginger and turmeric are the major spices of India. These spices constitute more than 80 percent of the country's total export earnings from spices. The export of spices from India has been much better in terms of earnings during the decade of the 1980s as compared to the decade of the 1970s (table 7, chapter-III). The annual average export earnings in the decade of the 1980s has gone up to Rs. 186 crores from Rs. 83 crores in the decade of the 1970s.Since 1984-85 export earnings from spices have achieved new records and performance in the year 1987-88 has touched a peak level of Rs. 298.0 crores. However, in 1988-89 it declined to a level of Rs. 282.8 crores and further to Rs. 274.4 crores in 1989-90. On the whole, the export of spices has shown highly fluctuating trends since Third Five Year Plan (table 3, chapter-III). These trends have been because of a number of constraints which have come in the way of steady growth of spices exports from India.

The major problems making inroads in the augmentation of exports of spices from India are discussed below.

1. Fluctuation in Prices:

Majority of spices growers in India are small and marginal farmers for whom better prices are the best incentives. Hence, when prices become attractive production level improves. On the other hand. unremunerative prices lead to fall in production. Any short fall in production results in higher internal market prices. As the domestic prices and export prices are interrelated and influenced each other, a rise in domestic prices makes the commodity uncompetitive in the world market. Thus, the variation in prices leads to high degree of risk and indecision among the growers of spices to cultivate the same. Because of the wide fluctuations in prices, the markets remain unstable and uncertain throughout the year and this uncertainty results into restricted investment in export trade of spices.

The fluctuations have been of alarming nature in prices of cardamom in certain years. A few exporters in India, numbering less than fifteen, control the bulk of the cardamom trade and export from the country. The changes in world supply and demand and speculation by these few exporters in India, compounded by fierce competition among world exporters, have created a

situation of constant instability of cardamom prices in India.[1]

2. Heavy Taxation:

A major problem that the exporters of spices have been facing is related to the payment of sales tax/purchase tax on stocks offered for export. Though, Govt. of India have amended the Central Sales Tax Act to exempt agricultural commodities for export from the levy of sales tax/purchase tax as a measure to improve their competitiveness in the world market but tax exemption is allowed only if the purchase is subsequent to a firm export order. Consequently, exporters feel difficulty in purchasing the product during season for future export.

3. Poor Research Support:

Inspite of several Research Centres and Agricultural Universities working in the field, there has not been any commendable success in evolving a better technique of post harvest. They have also not been able to find out suitable remedies for seed diseases and pests which carry from season to season.

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1. Nayar, K.G.; "Problems & Prospects of Marketing Indian Cardamom at Home and Abroad" Thesis submitted for the award of Ph.D in Economics at the Cochin University of Science & Technology, Cochin, 1982, p-237.

4. Low Productivity And High Cost of Production:

The prices of Indian spices are generally high in international market due to high cost of production. As cost of production principally depends upon yield rates and India has the lowest productivity of spices in the world. For instance, the average yield per hectare of Indian pepper is about 275 kg. as compared to 496 kg. in Indonesia, 1433 kg. in Brazil and 2374 kg. in Malaysia. Similarly, the average yield per hectare of Indian cardamom is about 66 kg., while the productivity of Guatemalan cardamom is estimated to be around 200 to 250 kg. per hectare.

Though, the consumer preference in the Middle East countries is still in favour of Indian Cardamom but due to the considerable difference in prices turn the behaviour of the customers in favour of Guatemalan cardamom.

5. Absence of Comprehensive Publicity Programme:

Another major bottleneck in the development of export of spices is the absence of wide publicity outside India. At present promotional efforts for spices exports is under-taken by the Spices Board. However, their efforts are confine only to participation in international trade fair, demonstrations and publicity through literature. This kind of publicity is not enough for developing tastes among foreign buyers for

Indian spices. Apart from this, the efforts made so far have not been done on a permanent basis in all the major and potential markets. East European countries have emerged as big markets for Indian pepper but so far there has been required publicity in this region. The finances have also been great hurdle in intensive and extensive publicity.

6. Absence of Co-ordination in Production and Marketing:

At present multiple agencies are looking after the various aspects of production, marketing, research, export promotion etc. of spices. The absence of a Central agency and an integrated approach has proved to be a major constraint in maximising the efforts on the development of production and export of spices.[1]

The Directorate of Cocoa, Arecanut and spices Development, Calicut, is responsible for the development programme for spices, while the Kerala Agriculture University, Trichur, undertake research on the various aspects of the crop. The spices Export Promotion Council now Spices Board is responsible for promotion of export of spices and look after the interests of the spices trade. Besides, research on product development and processing technology is being undertaken by Regional Research Laboratory, Trivendrum. Research on developing new strains with high yield and disease resistance and various

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1. Jacob Baby, "Export Development of Kerala", op. cit., p-155

agronomic aspects of the crop is also being conducted by Central Plantation Crops Research Institute, Vittal. Such multiplicity of agencies create much confusion as their areas of operation are overlaped. It is not possible to have effective coordination between them as they are under the administrative control of different ministries and institutions.[1]

7. Speculative Activity:

Speculative activity is one of the most important problems in establishing the prices of spices particularly of pepper and turmeric. The prices of spices in the domestic as well as world market are manipulated by intense speculative activity in the futures market in cochin. Most of the transactions are in the nature of paper transactions and actual volume of commodity transactions is very limited. A number of traders rather than genuine exporters/traders are involved in speculative activity. By manipulating buying and selling in the trading rings it is possible for the speculators to push up and bring down the prices.[2]

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1. Jacob Baby, "Export Development of Kerala", op. cit., p.156.
2. Status Paper on Spices (1988), op. cit., p.26

8. Low Exportable Surpluses:

This problem has severally affected the exports of spices from the country. Low level of surpluses for export may be attributed to proportionately higher domestic consumption or low level of production. In recent years the production of cardamom (small) has been very low in view unfavourable climatic conditions and existence of old, diseased and uneconomic plantations. While the export of chillies, ginger and turmeric has been suffering because major part of the total production is consumed within the country.

9. Poor Services:

It is not unusual to hear complaints from importers of spices about the poor services rendered by some of the Indian exporters. These complaints are of wide and varied nature, but the complaints such as despatch of goods not in conformity with the samples upon which sale had been concluded, non-adherance to delivery schedules and non-payment of commission in time have tended to loose confidence and thereby affected export prospects.[1]

10. Involvement of More Middlemen:

Another important handicap in export of spices is that in most of the States middlemen indulge in malpractices and as

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1. K. Das Prafulla, "Future For Black Pepper is not that Bleak", op. cit., p-896.

result of which the exports as well as producers suffers to a great extent i.e. the exporters by way of quality and producers by way of price factor. The middlemen take away the Lion's share of the selling price and the poor mostly illiterate cultivators are duped in many respects. The involvement of more middlemen at different stages discourages the producers and consequently the export. The working of cooperative societies has not been satisfactory in this respect.

11. Lack of Improved Methods of Curing and Polishing:

As the buyers in foreign markets are quality concious and prefer better cured and polished spices, there is still lack of curing houses with improved technology which can retain the colour of cardamom green. Also the existing curing methods are cost effective. Similarly in case of turmeric, the improved type of furnace evolved at Orissa has been found to be more efficient and economical in fuel consumption than the local type. The cured product polished by the equipment evolved in this state has fetched a premium price but the same has not been provided sufficiently in all the growing states.

12. Lack of Direct Shipping Facilities:

Another major problem which the exporters of spices have been facing is the lack of speedy transportation facilities. For instance, there is no direct shipping services from Cochin to various importing countries, particularly the U.S.A.

which is the largest exporter. Also there is no break bulk vessel service between Cochin and Bombay. Existing break-bulk service from Calcutta to New York does not touch Cochin. Besides, exporters who have not port facilities in their own states have to send the spices for shipment to far off places which involves an extra expenditure. Therefore, the spices of portless states become costly and face price competition.

13. Lack of Quality Control Measures:

Quality is an important aspect in export trade of spices. Indian spices is often rejected by the importers on the grounds of quality. In recent past Food And Drug Administration (FDA) had banned the entry of Indian pepper into U.S. after detecting the 'rodent excreta' in the commodity.[1] However, this ban has been lifted by the F.D.A. after extensive discussion between the representatives of the two countries. Besides, India is facing a lot of problems on quality fronts in overseas markets due to lack of proper cleaning, processing and grading facilities.

14. Non-Adoption of Better Packaging:

Though, Indian Institute of Packaging, Bombay, has developed better methods for consumer and bulk packaging but

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1. Financial Express, New Delhi, March 6, 1989, p-1

the exporters of spices particularly of cardamom in India are not willing to change the traditional method of packaging. It is true that the traditional packaging has the advantage of being Indian origin but in case of bulk packaging it has many disadvantages as it incurs the additional cost of handling, transit and storage.

15. Lack of Product Development:

Lack of product development is another vital factor in realising the full value of spices in international market. More than 90 percent of the Indian spices are exported in raw form and fetching relatively low price. According to an estimate spices in raw form exported to millers/grinders abroad, when repacked under renowned brands fetch more than 300 to 500 percent value at retail point.[1] Thus, the exporters of raw spices do not get only full value but their products have no separate indentity. Besides, they are dominated by international supply and demand factors also.

16. Lack of Financial Resources:

Indian exporters of spices are facing two dimensional financial problem. On the one hand, the private capital is shy and entrepreneurial efforts are lacking in increasing the

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1. Nambiar, O.T.S. "Spices Exports And Branding Concept", Yojana, New Delhi, March 16-31, 1991; p-28.

value and volume of the country's export. Cost of capital involved also remained substantially high due to higher interest rates of export credit. On the other hand, foreign exchange crisis has also made the situation grim. The exporters willing to make frequent business visits abroad, intending to maintain their offices in foreign countries and want to have the services of specialised agencies and agents etc. of the importing countries are often handicapped because of non-availability of foreign exchange in time as well as to a desired extent. The financial crunch, very often, causes heavy loss of goodwill of the exporters resulting in lower export potentials in future.

17. Market Research:

Though indispensable, market research is an expensive affair in capturing the international market. Individual exporters are usually unable to conduct proper surveys and interviews because of the element of cost involved alongwith the lack of personal contacts and differing linguistics, social and cultural setups.

18. Stagnation in Demand:

Middle East countries are the largest importers of spices in the world. Saudi Arabia is the largest consumer among them, accounting for more than 50 percent of the total

world imports of cardamom. But in the decade of the 1980s the demand for spices especially the cardamom in most of the Middle East countries has been either stagnated or decreased because these countries have been facing recession for the last several years. Apart from this, the economy of Saudi Arabia, Iraq and Kuwait has been badly affected in view of the recent Gulf war which has affected their spending pattern. Thus, the low offtake of spices by these countries have made inroads in increasing spices export earnings of India.

19. High Cost of Transportation:

Air lifting of spices have been proved advantageous in reaching market in time thereby maintaining their delivery schedules. Early arrival of Indian spices by Air can take benefit of the increased demand in Middle East markets at the advent of winter season. But there has been wider difference between air-freight and shipfreight All the exporters particularly small exporters can not take advantage of air transport. Though, there is air freight subsidy of Rs. 7 per kg. but it is not sufficient to bridge the gap.

20. Non-Adoption of Proper Post Harvest:

The world importers often reject Indian spices on the grounds of quality. In the year 1986 there was a problem relating to export of pepper to U.S.A. on account of contami-

nation of shipped pepper with Ethylene di Bromide, a toxic fumigant. In july 1987 Indian pepper was placed under automatic detention by F.D.A. of U.S. on account of contamination by rodent excreta, bird excreta and mould. In U.S.S.R. and East European countries, frequent cuts on value have occasionally been imposed on account of quality complaints.[1] These problems of contamination arise mainly due to improper post harvest at the ends of growers and exporters.

21. Lack of Proper Processing And Grading Facilities:

Lack of proper processing and grading facilities continue to be a major constraint in maintaining high level of quality. At present garbling, which is the main process for preparation of pepper for export, is done partially by hand and partially by machines. The big export houses have mechanised the system but even in these cases certain operations are done mannually. While the cleaning, processing and grading of cardamom is entirely mannual, one worker can process only 8 kg of cardamom in a day. Thus, during peak season when arrivals of cardamom for export are very high, there is shortage of man-power for processing resulting into low export susplu-ses.

22. Double Inspection Charges:

Another important problem which the exporters of spiees

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1. Status Paper on Spices (1988), op. cit., P-26

have been facing is that Agmark authorities have been levying a one-time inspection charge regardless of the number of testing before a lot is finally cleared. On the other hand, the Export Inspection Agency is levying charges on each inspection irrespective of whether the lot is passed or not. This sort of practices certainly add the cost of export and will make the product uncompetitive in the world market.

Conclusion:

From the foregoing pages it is observed that there are so many constraints which have been affecting the inflow of foreign exchange earned from spices exports into the country. These constraints must be tackled on war footing so that potential of earning foreign exchange from the exports of spices could be maximised.

Chapter - XI

FUTURE PROSPECTS OF INDIA'S EXPORTS OF SPICES

By 2000 A.D.

Chapter -XI

FUTURE PROSPECTS OF INDIA'S EXPORTS OF SPICES BY 2000 A.D.

Foreign exchange reserves crisis has become one of the major hurdles in India's rapid economic progress. Debt servicing ratio has also been mounting fast, requiring remedial measures on war footing. Similarly, due to behooved trend in the economy, import bill could not be brought down and hence the only way out is that to expand the exports substantially so that foreign exchange earnings could be enhanced on an increasing scale. Hence, increase in export has become important for accelerating India's economic growth. In other words, failing to achieve the substantial export growth, the country will not be able to meet its foreign exchange requirements needed for developmental work and also for debt servicing which has reached to an explosive extent. India not only failed to maintain its share in world export, but also lagged behind significantly in increasing its agricultural exports.

Spices have been one of the important items of India's agricultural exports from the times immemorial. India is known as a land of spices due to the fact that there is no country in the world which grows as many kinds of spices as India. So far as export is concerned, a large number of spices such as pepper, cardamom, chillies, ginger, turmeric, curry powder, cumin,

celery, fenel and fenugreek are exported from India. But pepper, cardamom, chillies, ginger and turmeric are the major spices of India as their contribution to the spices economy in regard to foreign exchange is very substantial. On an average, India accounts for more than 20 percent of the totalworld spices export earnings. The contribution made by the exports of spices to the national exchequer generally varies between 1 to 3 percent of the total India's export earnings.[1] Similarly, spices constitute more than 8 percent of the total India's agricultural exports.

The overall export performance of India's major spices has been unsatisfactory and as a result the volume of cardamom, chillies and ginger exports have been badly affected. Similar is the case in regard to the value earned from major spices (viz. cardamom, chillies and ginger) which has also been lagging far behind as compared to turmeric and pepper. Cardamom, chillies and ginger have also recorded a decline in their respective shares in total spices export earnings. Not only this, the share of export to production of cardamom, chillies and ginger have also reduced alarmingly. These trends have been persisting due to many constraints affecting the exports of major spices. Let us now examine the trends in

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1. See table-11, chapter-II

world demand of spices by the end of 2000 A.D. Table 1 gives the trends in world demand estimates of spices by the end of the 20th century.

Table -1

World Demand Estimates by the End of 2000 A.D.

('000 tonnes)

Commodities	Annual Average growth rate(in %)	1995	2000 A.D.
Pepper	1.7	162.0	185.0
Cardamom(Small)	2.0	11.0	12.0
Chillies	7.0	30.0	37.0
Ginger	2.9	20.0	23.0
Turmeric	10.0	30.0	37.5

Source: Extracted from the proceedings of the Workshop on Strategies for export Development of Spices, op. cit., p-74

Keeping in mind the world demand estimates of spices, we will examine the future trends in India's exports of spices so that we could get a comparative picture and thereafter could also compare growth rates. This would enable us to prepare an action plan for increasing spices exports for meeting world demand in a big way.

Future Trends In India's Exports of Spices

On the basis of the growth rates attained in regard to exports of India's five major spices during last 28 years (1960-61 to 1988-89) we hereby project India's exports of spices by the end of 2000 A.D. as under:

Table -2

Estimates of India's Exports of Spices

Commodities	Annual Average Growth rate (in %)	1995	2000 A.D.	India's proposed target by 2000 A.D.*
Pepper	3.3	50.3	57.8	75.0
Cardamom(Small)	-4.5	0.6	0.5	4.8
Chillies	6.4	8.0	10.6	15.0
Ginger	-0.7	4.8	4.6	10.0
Turmeric	9.3	30.0	45.9	30.0

Source: Computed and Compiled by the Researcher

*This target has tentatively been fixed by Spices Board, Cochin.

Methodology Used:

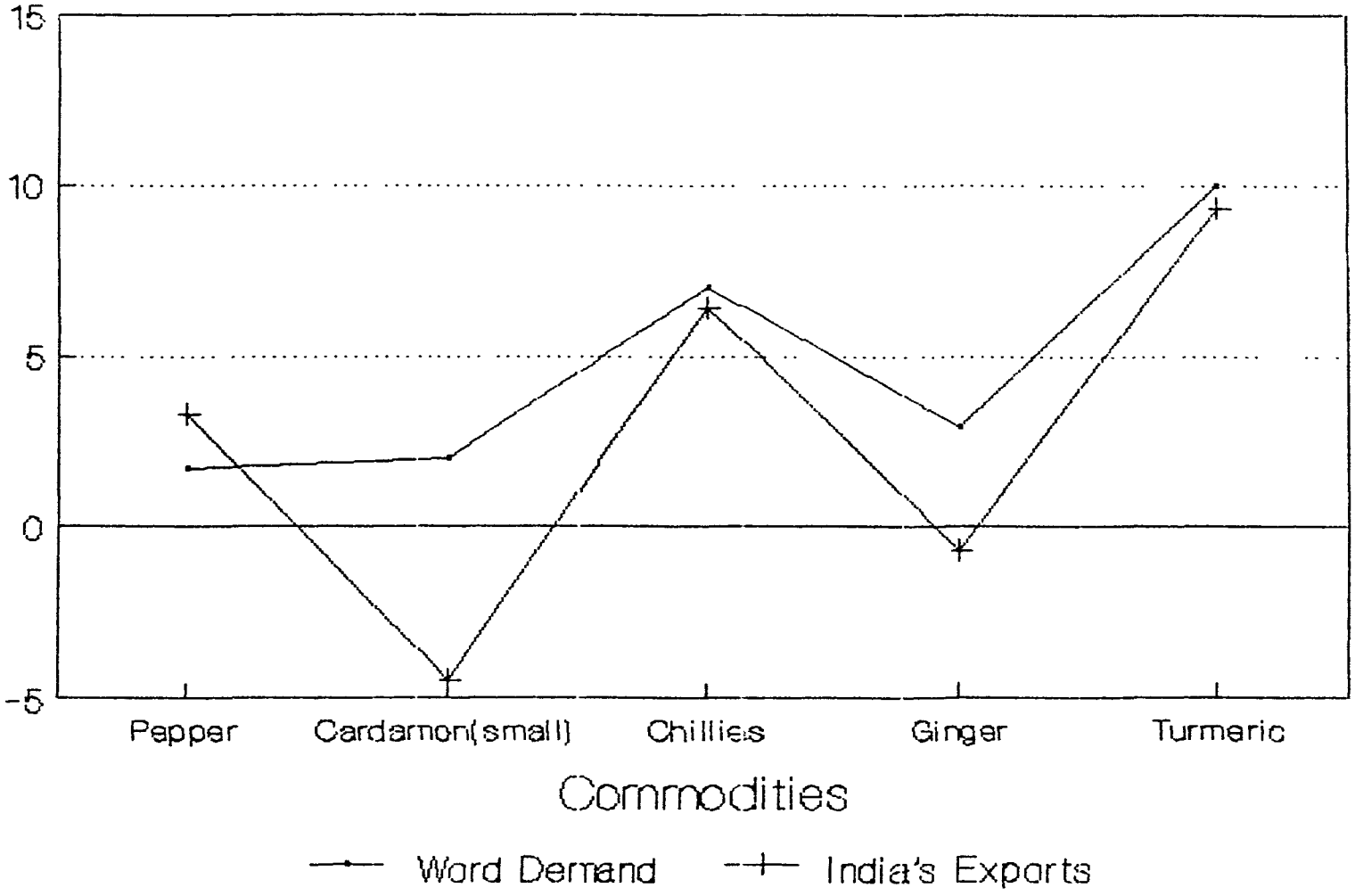
On the basis of the growth rates attained by five major spices during the last 28 years (1960-61 to 1988-89) the projection in regard to India's exports of spices for 1995 and 2000 A.D. has been worked out as under:

i) the growth rate of quinquennial periods has been drawn;

ii) the averages of these growth rates have been taken.

CHART - 1

ANNUAL AVERAGE GROWTH RATE IN WORD DEMAND AND INDIA'S EXPORT OF SPICES



(IN %)

A Comparison:

From the table 1 and 2 it may be noted that India's export performance of pepper is estimated to be better as the annual average growth rate is higher than the growth rate of world demand estimates. The export performance of chillies and turmeric may also be considered moderate as it closely followed the growth rate of world demand estimates. However, cardamom and ginger are the spices of great concern for India. Over the last 28 years both the spices have registered negative growth rates despite the fact that there has been constant increase in world demand for these spices.

Notwithstanding the fact that the annual average growth rate in export of pepper from India is higher than the growth rate in world demand estimates, the export of pepper from India will be 57.8 thousand tonnes by the end of 20th century, while the proposed target of India's pepper export is 75.0 thousand tonnes. Similarly, cardamom, ginger and chillies will also be unable to achieve the targets by 2000 A.D. if the present trends are continued. The export performance of turmeric is expected to be good and it will cross the proposed target of 30.0 thousand tonnes by the turn of 20th century. Hence, an viable and effective action plan is needed

for the attainment of the targets laid down. Chart-1 gives clear comparative trends in regard to world demand of spices and trends in India's exports of major spices by the end of 2000 A.D.

An Action Plan:

The basic action plan needed for increasing India's exports of spices is lying in the sincere efforts in regard to development of production, productivity and raising sufficient exportable surpluses. Thus, the programmes for increasing the production and productivity of spices should be based on both the short term as well as long term basis. The short term measures include the adoption of scientific manuring and plant protection measures from the devastating diseases, replantation of drought affected areas, old, diseased and uneconomic plantations, making available high yielding disease resistant varieties emerging out of different research centres. Extension of advisory services and irrigation facilities are also of considerable importance. As long term measures, it may be suggested that cultivation of spices particularly of pepper, cardamom, ginger and turmeric should be extended to non-traditional areas. Similarly, by improving the yield rates the cost of production should be minimised. There is also a need to reduce the cost of processing so that

Indian spices may become competitive to face international competition. Keeping in mind the drought situation, it is imperative to evolve cultivars tolerant to drought. The following are the suggestions to make action plan more viable, economic, productive and result oriented.

1. Price:

Prices of spices can be stabilised at national level on the one hand and at the international level on the other. On domestic front it can be done by stimulating productivity and consequently the total output. These efforts will ensure remunerative prices to the growers and thus may reduce the alarming gap between internal prices and international prices. Similarly, these steps will also help in making buffer stock which can be floated for keeping the prices stable. During the interim period and till the India's productivity reaches the desired level the Government should extend fiscal support schemes like distribution of quality seedlings at subsidised rates, granting subsidy for installing irrigation system, distributing plant protection chemicals and equipments at cheaper rates etc. At international level, no individual country will be able to stabilize the prices as no country holds the monopoly. It is, therefore, suggested that major exporting countries such as India, Indonesia, Brazil and Malaysia in

case of pepper, India, Guatemala, Tanzania and Sri Lanka in case of cardamom should come forward and work together in this direction. Similarly, other spices exporting countries should also sit together and should make efforts in this direction. This can be done by fixing the minimum export price agreeable to all countries which may be higher than the cost in even the least efficient country after considering its impact on world demand. There would also be the need to agree to a maximum price so that it may not adversely affect demand in importing countries. Besides, the prices of spices can be stabilised by exporting spices in consumer packs with a brand name. By doing this the competition on price front will be less and the battle will be confined only to non-price factors such as quantity, brand, product differentiation and segmentation.

2. Speculative Activity:

In view of speculative activity it is suggested that Government should evolve a Sound marketing system which will bring some measures to remove speculation and give stability to the spices economy. Several reforms may be made to strengthen the existing marketing system. The present cooperative network should be strengthened by establishing more rural godowns with greater facilities at various centres. Secondly,

Government should establish some more regulated markets as these markets are running very successfully in some of the states. Thirdly, auctioning of spices should be tightened under the auspices of the Spices Board itself.

3. Unified Agency:

To overcome the problem of coordination among the different agencies looking after the developmental activities in regard to production, marketing research and export promotion etc. of spices, there should be a central agency under the administrative control of one ministry or institution which can direct and bring coordination in the functioning of these agencies.

4. Taxation:

In view of purchase tax, it is suggested that tax should be realised only if exporters do not produce export orders within six months of purchasing. In other words, they should be given six months time to show export orders after purchase is made.

5. Publicity:

As the export of spices suffers on account of comprehensive publicity abroad, the methods of publicity should be made more practical and attractive. Besides publicity through

international trade fairs, demonstrations and literatures, arrangements should also be made on a regular basis to serve food dishes alongwith the pepper and other major spices in big hotels in major cities of different importing nations. It may have a great impact on developing tastes. Efforts should be made specially with Indian resturants in foreign countries, where Indian curries, snacks and food dishes are served and at the same time attractive brochures containing recipes should by freely distributed. As the resources of India is limited, it can not spend much more money on publicity unless India is sure of benefit. Therefore, an effort should be made for joint publicity drive by India and other major spices exporting countries. For popularising Indian spices abroad there is also a need for introducing a brand name as a guarantee of purity and high quality. As part of the West European market development scheme, an Indian Spices Information Bureau (ISIB) has been started in London to maintain continuous contacts with European importers. A vigorous publicity compaign has also been planned by the Spices Board which may go a long way in increasing exports in a big way. The said type of bureau (ISIB)[1] should also be set up in other countries of the Middle East.

6. Quality:

In view of quality standards Mr. Mariwala (Vice-Chairman, Spices Board, Cochin), has rightly suggested that

1. This type of bureau has been established in Bahrain

quality control scheme should be managed by Spices Board by setting up modern laboratories in major exporting centres. This could be materialised with the help of technical assistance from developed countries. Further, Board should encourage voluntary quality control schemes, where the standards could be monitered by exporters themselves. Large exporters should be given license to set up their own laboratories and they should be motivated by giving subsidies for the same. Intensive compaigns should also be launched for educating the growers,dealers and exporters on the need for hygenic processings and storages conditions of spices so that improvement in quality could be achieved.

In view of inadequate equipments for better curing and polishing of spices, the Government should provide enough equipments for the same in all the growing states so that quality of exportable spices could be improved further.

The spices Board has prepared a five years plan to modernise the facilities for cleaning, processing and packaging of pepper and other spices alongwith godown facilities. The latest quality drive has brought Export Inspection Agency (EIA) on the scene. Export consignments are now subjected to stringent testing at EIA laboratory in Cochin before being

certified. The EIA testing procedure is modelled on the methods adopted by Food And Drug Administration (FDA) of the U.S.,Specific ceilings on the presence of foreign matters which run down to as low as 0.1 mg. in one pound of pepper, are strictly observed in the course of various tests. Special attention is also given to incidence of fungal attacks, pesticides residue and contamination by micotoxins.[1] These steps may go a long way in maintaining the quality of spices and make them more competitive in international market.

7. Middlemen:

In view of stiff competition and involvement of more middlemen, a move should be launched to reduce the number of middlemen to the desired extent to bring down the prices of spices and thus making product competitive in international market.

8. Market Research:

As the market research is the costly affair, Government should take the responsibility of conducting market surveys abroad in regard to the demand of spices on a regular basis. The report of these surveys should be completed in short span of time bringing correct and comprehensive information required about the potential importing countries so that the use of it could be made meaningful and purposeful.

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1. Financial Express (N. Delhi), March 6, 1989, p.1

9. Finance:

Establishment of a separate financial institution is of paramount importance in view of the financial requirements of exporters of spices. This financial institution should offer credit to exporters at lower interest rates keeping in mind the short term and long term needs. For foreign exchange, the current provision of facilitating the use of 60 percent foreign exchange earned by the exporters is expected to give substantial relief to the exporters as foreign currency will be available to them in open market.

10. Levy:

It has been pointed out that Agmark authorities[1] have been levying a one-time inspection charge regardless of the number of testing before a lot is finally cleared. On the other hand, the Export Inspection Agency (EIA) is levying charges on each inspection irrespective of whether the lot is passed or not. This sort of practices add to the cost of export and make the product uncompetitive in the world market. Therefore, a one-time levy is suggested.

11. Research And Development:

In view of overcoming the problems in regard to diseases and pests, it is suggested that agricultural scientists

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1. Financial Express (N.Delhi), March 6, 1989, p.1

should pay a little more attention to find out suitable measures for controlling seed diseases and pests. There is also a need to take up research on technological and physiological aspects of chillies to increase the 'alkaloid' content and improve the quality and vitamin 'C' content for meeting the future demands of the medicine industry. If scientists are able to get some positive results in this direction, the demand for chillies in industrial countries may go up in a big way.

12. Warehousing:

In many countries Indian Spices do not get full value because of a lot of time is involved in transportation. In view of this, it is suggested that warehousing facilities should be provided in major importing countries. Though, the airlifting in regard to cardamom has been proved advantageous but the difference between airfreight and shipfreight is very high. Therefore, Government should take certain measures to reduce this gap so that even small exporters could make use of it. Apart from this, there should be a provision of sufficient air-tight storages so that aroma and colour of spices particularly of cardamom could be preserved.

By the construction of modern stores the problem of rooting and shrivelling of spices during storages particularly of ginger could also be minimised.

13. Port:

As some of the spices growing States do not have the port facilities, the Government should shoulder the responsibility of developing ports where it is possible and where there is a possibility of exports so that a good number of businessmen may come to forefront to enter overseas trade resulting in augmentation of exports.

Availability of direct shipping to major importing nations or via Cochin also needs immediate attention to avoid unnecessary delay in delivery.

14. New Markets:

In view of stagnation in demand for Indian Spices especially cardamom in Middle East countries, efforts should be made to develop new markets like Australia, Japan and other European countries by popularising Indian spices particularly Cardamom there. Steps should also be taken to bring down the prices of major spices especially Indian cardamom in Middle East markets itself at least on par with the prices of major exporters especially Guatemalan cardamom so that the demand for Indian spices particularly cardamom could be re-established.

15. Product Development:

Indian spices have not been getting its full value in

overseas market due to the lack of product development. In this context, an effort should be made to export our spices in value added forms in 1 kg. or 2 kg. packs with a trade mark carrying a brand name that ensures quality. Once the image of the brand is established, customers are compelled by themselves to purchase of the product of that brand. The image of better and consistent quality creates better confidence among the buyers and to that extent does more business.

16. Grading:

In view of uneven grade standards, it is suggested that there should be uniformity in grade standards of spices throughout the country. It may create better confidence among foreign buyers for Indian spices. It is also suggested that there is a need to reduce the number of grades as at present more than 30 grades of cardamom are in practice which confuse the importers abroad.

17. Post Harvest:

To market a better quality of spices and to minimise the loss during traditional method of post harvest viz. sundrying, it is suggested that the modern methods of post harvest like mechanical drying or dehydration by artificial heating should be adopted. In this connection financial institutions

should provide sufficient credit to farmers as the cost of adopting these methods is very high. Research and Development activities should also be strengthened so as to provide low cost mechanical device and technology for the purpose.

18. Special Varieties:

It has been reported that 'Tellicheri' - a pepper variety is commanding a premium price in Italy.[1] It is, therefore, suggested that export of this variety should be encouraged by replacing consumption of tellicheri by local varieties in domestic market. Added to this, growers should be convinced to produce this valuable variety on a larger scale. An effort should also be made to introduce tellicheri in other West European markets and at the same time importers should be educated about the real source of this variety.

It has also been observed that 'Malabar' type cardamom is comparatively drought tolerant with promising yield. It is, therefore, recommended that cultivation of this variety should be stimulated. This will help prevent diversion of 'Alleppey' green towards domestic market because this variety is commanding height in Middle East countries. Besides, Alleppey green

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1. Financial Express (New Delhi), March 6, 1989; p-1

should also be popularised in other countries of the world.

Like pepper and cardamom, chilli has also a special variety with highest heat value named 'Bird Eye' which is in good demand in U.S.A., Japan and various European markets. Through exports of this variety, there can be a minimum export earning of Rs. 10 crores per annum.[1] Therefore, it is suggested that the export of this variety should be encouraged. To enhance the export of chillies there is also a need to develop and popularise varieties which can lend themselves to soup powder, pickles and for production of alkaloid capsacin for medicinal purposes.

Since the entire export supply of ginger comes from Kerala, concerted efforts should be made to increase the production of Cochin and Calicut varieties. Rio-de-Janerio has four times more yield than that of Indian ginger.[2] This variety has a great potential for domestic consumption and its cultivation should be made popular in other States also. By doing so the produce of Kerala can be kept free from domestic consumption and thus it can be exclusively exported. Similarly, a

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1. Spices Board, Cochin, Spices News Letter (M), July, 1988; p-11

2. Spices News Letter (M), March, 1988, op. cit. 0.12.

major part of exportable turmeric comes from Kerala and Andhra Pradesh and the two turmeric varieties namely 'Krishna' and 'Suvarna' have maximum yield and is suitable for internal consumption. Therefore, the produce of Kerala and Andhra Pradesh can exclusively be made available for export by floating Krishna and Suvarna in domestic market.

From the foregoing discussions it may be concluded that once the above mentioned suggestions are implemented in their true spirit, a new era may emerge to attain all round prosperity and growth in India's exports of spices which will go a long way in achieving India's lost glory in the 21st century.

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Appendices

Appendix-I

Pepper Export From Major Exporting Countries 1982-1986

('000 tonnes)

Country	1982	1983	1984	1985	1986
Brazil	46.2	30.4	37.2	24.7	22.1
India	22.5	25.7	25.4	19.5	49.8
Indonesia	36.3	45.1	33.8	26.2	29.6
Malaysia	25.1	23.5	16.4	18.9	15.4
Madagascar	2.2	3.2	2.8	2.6	2.6
Total including others	133.7	130.0	120.1	95.0	122.7

Source: Pepper Statistical Year Book, 1986, International Pepper Community, Jakarta, Indonesia.

Appendix-II

Pepper Production In Major Producing Countries 1983-1986

('000 tonnes)

Country	1983	1984	1985	1986
Brazil	29.3	35.4	30.5	25.3
India	23.0	20.6	55.0	40.0
Indonesia	39.6	41.2	41.0	37.0
Malaysia	23.4	16.5	16.0	15.5

Source: Same as appendix I

Appendix -III

Guatemala's Production of Cardamom Between 1970-71 and 1988-89

('000 tonnes)

Year	Production
1970-71	1.0
1979-80	2.1
1980-81	3.4
1985-86	5.5
1986-87	8.0
1987-88	9.5
1988-89	8.0

Source: Spices Board, Cochin, Status Paper on Spices (1988), p.31